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MODERN PHILOSOPHY,

FROM

DESCARTES TO SCHOPENHAUER

AND

HARTMANN.

BY THE SAME AUTHOR.

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MODERN PHILOSOPHY,

FROM

DESCARTES TO SCHOPENHAUER

AND

HARTMANN.

BY

FRANCIS BOWEN, A. M.,

ALFORD PROFESSOR OF NATURAL RELIGION AND MORAL PHILOSOPHY IN HARVARD COLLEGE.

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PREFACE.

It has not been my purpose in this work to write a complete History of Modern Philosophy. Such an undertaking, if fitly carried out, would far exceed the limits within which I wished to keep, and would compel me to enter into some wearisome details. I have endeavored to present a full analysis and criticism of the systems only of those great thinkers whose writings have permanently influenced the course of European thought, paying most attention to the earlier French and later German philosophers, with whom comparatively few English readers are at all familiar. Hence I have said little about Hobbes or Locke, Hume, Reid, or Hamilton, whose writings are accessible to all, and who ought not to be studied by thoughtful and earnest inquirers at second hand. But the great names of Descartes, Spinoza, and Malebranche, of Leibnitz and Kant, of Fichte, Schelling, and Hegel, are little more than names with most English students, even including many of those who assume to weigh their systems against each other and to dogmatize respecting their merits and defects. Perhaps the experience of one whose duty it has been for many years to lecture upon their writings to large classes of University students may have been valuable, in so far as it has induced the endeavor to make intelligible what is abstruse and obscure, and to render a discussion interesting which may appear at first sight repulsive, though it is really important and profound. I believe that Kant, Hegel, and Schopenhauer, to mention no

others, have not been fairly appreciated by English students of philosophy, because they have not been thoroughly understood, probably for the reason that metaphysical thought on the Continent of Europe generally assumes a pedantic and technical garb to which the countrymen of Locke and Berkeley are not habituated, and for which they have an instinctive dislike. A translation of their works, however faithfully executed, is even more obscure than the original, as it sacrifices the advantage which one who studies them in German possesses through the etymology of the technical terms, which often reflects much light upon their meaning and upon the general course of thought. My purpose has been to furnish an exposition of their systems which should be intelligible throughout, and also comprehensive enough to enable the student to form a fair estimate of their excellences and defects, and even, if he wishes, to peruse with little difficulty the works themselves, either in the original or in an English translation. In particular, I have endeavored to give a complete analysis and explanation of Kant's "Critique of Pure Reason;" for one who has fairly mastered this great work holds the key to all German metaphysics.

One who publishes a treatise upon Modern Philosophy, however, may reasonably aspire to be something more than a commentator. Aiming to be thorough and impartial in setting forth the opinions of others, I have also held it to be a duty frankly to avow and earnestly to defend the whole doctrine which appeared to me to be just and true, whether it was also of good report or not. No one can be an earnest student of Philosophy without arriving at definite convictions respecting the fundamental truths of Theology. In my own case, nearly forty years of diligent inquiry and reflection concerning these truths have served only to enlarge and confirm the convictions with which I began, and which are inculcated in this book. Earnestly desiring to avoid

prejudice on either side, and to welcome evidence and argument from whatever source they might come, without professional bias, and free from any external inducement to teach one set of opinions rather than another, I have faithfully studied most of what the philosophy of these modern times and the science of our own day assume to teach. And the result is, that I am now more firmly convinced than ever that what has been justly called "the dirt-philosophy" of materialism and fatalism is baseless and false. I accept with unhesitating conviction and belief the doctrine of the being of one Personal God, the Creator and Governor of the world, and of one Lord Jesus Christ, in whom "dwelleth all the fulness of the Godhead bodily;" and I have found nothing whatever in the literature of modern infidelity which, to my mind, casts even the slightest doubt upon that belief. Not being a clergyman, I am not exposed to the cruel imputation which unbelievers have too long been permitted to fling against the clergy, of being induced by prudential motives to profess what they do not believe. Let me be permitted also to repeat the opinion, which I ventured to express as far back as 1849, that "the time seems to have arrived for a more practical and immediate verification than the world has ever yet witnessed of the great truth, that the civilization which is not based upon Christianity is big with the elements of its own destruction."

HARVARD COLLEGE, CAMBRIDGE, *July* 3, 1877.

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MODERN PHILOSOPHY.

CHAPTER I.

INTRODUCTORY. — THE PHILOSOPHY OF THE SEVENTEENTH CENTURY. — RELATIONS OF PHILOSOPHY TO PSYCHOLOGY AND LOGIC.

WHAT we have first to consider is the philosophy of the seventeenth century; and this as represented to us more particularly in the writings of Descartes and his immediate successors. Historically considered, the period is one of great importance. It is more fertile than any other century since the Christian era in the great names, and the leading dogmas and systems, of the philosophy of these modern times. It is the age of Descartes, Pascal, Spinoza, Gassendi, Malebranche, and Leibnitz, — of Hobbes, Cudworth, John Locke, and Samuel Clarke. I do not include the name which many will think the greatest of them all, because the philosophy of Bacon is primarily concerned only with the means of making discoveries in physical science, and, through them, of promoting the outward well-being of mankind, treating only incidentally, and with a view to this purpose, of the great problems of metaphysical science, and of those fundamental truths of our intellectual, moral, and spiritual being, which it is our present object to investigate. The "Novum Organon" ought to be read in connection with the writings, not of the great men just mentioned, except so far as some of these distinguished themselves also in the departments of mathematical and physical research, but of Kepler, Galileo, and Newton, of Franklin, Cuvier, and Faraday. The philosophy of modern inductive science will come into view in this book only so far as it is governed by the universal laws of thought and by the philosophy of the human mind.

The seventeenth century deserves study not only on account of

the genius of the great men who illustrated it, but because it was an epoch in the history of human thought, and the proper birth-time of the philosophy of these modern days. Every former age, every preceding school of thought, as far back at least as the origin of metaphysical speculation with the Pythagoreans and the Eleatics, was more or less colored by antecedent systems and the authority of former times. Each was built upon a foundation that had been already laid for it; each spoke to minds already to a great extent preoccupied. Even Plato professed only to repeat the colloquial teachings of his great master Socrates, and Aristotle continually refers to the doctrines of those whom he calls "the ancients," whom he cites, indeed, "with a sort of indulgent consciousness of superiority." At a later period, the Alexandrian School avowed the Eclectic principle, and put together a patchwork of Oriental mysticism and Greek dialectics. Then, for a long interval, philosophy was merged in theology, and all questions were answered peremptorily by the authority of the Scriptures and the Church. In Scholasticism pure speculation and argumentative subtlety revived, but only within the limits of faith. The ambition of Thomas Aquinas and the other Schoolmen was to erect theology into a perfect science, distributed into parts with exact method, and resting upon philosophical dogmas with a carefully traced filiation of doctrines. Aristotelic premises were evoked to support theological conclusions. Novelty was shunned, because it immediately incurred suspicion of heresy.

Then came a startling conjuncture of great events, which brought about a revolution in human thought and in the course of external affairs. The Revival of Letters, the invention of printing, the Reformation in religion, the discovery of America and the passage round the Cape of Good Hope, and the rapid development of the power of the municipalities and the burgher class, were all crowded together, so to speak, into one epoch, about the close of the fifteenth century. A great crisis had arrived, and men's minds were perplexed with awe and hope as old institutions crumbled around them, and former modes of thought became discredited. Other revolutions had been produced and accompanied by the shock of arms, and were productive in the main of material changes; but the present was an outburst of mental activity, which showed itself in the destruction of old dogmas, the progress of discovery and invention, and the collision of new opinions. Physical science started first in the race, and soon achieved great success, because it carried less weight; it was comparatively little

impeded by jealous authority or old traditions. Most of its devotees worked in an open field and without dread of consequences; the persecution of Galileo was an almost solitary case. Metaphysical science at first threw off the yoke of Scholasticism and the authority of the Middle Ages only to subject itself once more to the great minds of Greece, whose writings had been brought again to light with all the charms of novelty and the graces of eloquence by the Revival of Letters. The philosophy of the sixteenth century is rightly called by Cousin a necessary and useful transition from the absolute slavery of thought in mediæval times to its absolute independence a century afterwards. The leading philosophers of that century were great scholars, rather than great thinkers. They hunted out and collated old manuscripts; with indefatigable zeal and industry they translated, annotated, and lectured on Plato and Aristotle. We find among them a school of idealistic Platonism, always tending to mysticism, and a class of peripatetics, worshipping Aristotle, and always sliding into materialism and skepticism. The former school may be said to have begun with Marsilius Ficinus, and ended with the martyr, Giordano Bruno. The latter consisted of a crowd of speculatists upon medicine, astronomy, and cosmogony, not infrequently passing over into magic and thaumaturgy.

The glory remained for Descartes and his contemporaries and successors, the men of the seventeenth century, to break with the past altogether. They no longer deigned even to controvert ancient philosophy or mediæval metaphysics, but passed them by as obsolete, perhaps with silent contempt, and busied themselves with an attempt to reconstruct the philosophical edifice from its foundations. They accepted nothing upon authority; they borrowed not a stick or a stone from those who had gone before them. None of them were learned men, except in the mathematical and physical sciences. I mean they were not scholars in the technical meaning of that name; they cared nothing for antiquity, and seldom quoted books. Perhaps they carried this peculiarity too far; they had too much contempt for what had gone before; their chief fault was intellectual arrogance. For they aspired to reconstruct not merely the foundations of knowledge, but the whole structure; to build anew from corner stone to pinnacle. Each one aimed at completeness; each endeavored to think out a full theory of philosophy, with all the parts fitly dovetailed and put together. Philosophy to them was the science of first principles carried out to its ultimate results, and verified by its adequacy

to meet every case and settle every doubt. At least, this was eminently the case with Descartes, Spinoza, Leibnitz, Hobbes, and, though in a different sense, John Locke. It was long ago remarked of Descartes, that he began by doubting every thing, even his own existence, and ended by thinking that he had proved every thing, so as to leave his successors nothing to do. Spinoza followed the Cartesian method with even greater mathematical rigor and precision. Beginning after the manner of the geometer with a full series of definitions and axioms, by their aid he demonstrates in order all the propositions needing proof, and thus proceeds till he has covered the whole ground of possible knowledge. Though the writings of Leibnitz were fragmentary and miscellaneous, the character of his mind was systematic even to excess, and his genius more daring and comprehensive than that of any man of modern times. His towering ambition aspired to fashion and create anew all science and philosophy, through a few pregnant aphorisms and assumptions, which he stated with inimitable force and brevity; and though he was obliged to leave them not half worked out, many of them have been verified by the progress of discovery since his day, and have shaped the whole course of modern speculation. The character of Hobbes is intimated in his insolent remark, "If I had read as many books as other men, I should have been as ignorant as they are." According to an eminent critic, only Aristotle and Kant were his equals in what may be called the genius of System, — the logical filiation of doctrines having the broadest and most diverging consequences. His influence is even now predominant in one of the leading schools of speculative science both in England and this country. The modesty of Locke is as evident as the haughtiness and dogmatism of Hobbes. But his philosophy covers as much ground, though worked out in a different spirit and with a very dissimilar method. His object was "to inquire into the original, certainty, and extent of human knowledge," not by logical deduction from a few self-evident principles, but by careful observation and patient research. The characteristics of his work are sound judgment and clear common sense existing in that rare perfection in which they become coincident with far-sighted genius. In his Essay, he never cites Descartes or Hobbes by name, though his purpose evidently is to refute some of their principal doctrines.

One of the chief influences that shaped the philosophy of the seventeenth century was the rapid development, at that time, of mathematical and physical science. Descartes, Leibnitz, and

Pascal were the greatest mathematicians of their own age, and among the greatest of all modern times. The discoveries of the two former changed the whole face of the science and paved the way for all its subsequent success; and Pascal was a prodigy of parts, who discovered geometry anew, and seemed to discern by intuition what others could obtain only by patient and long continued effort. The rigorous methods of filiation and proof, the completeness, precision, and certainty which characterize mathematics, these men endeavored to transfer to philosophy. Spinoza and Hobbes, though not to so great a degree adepts in exact science, still strove, with good success in this respect, to follow their example. Locke, as might have been expected from his early studies in medicine, rather followed the inductive method, and aimed at completeness through a comprehensive examination of all the phenomena. Physical discovery had made vast progress, and the triumphant anticipations of Bacon had begun to be realized. Astronomical science had been revolutionized, and the discovery and proof of the great law of gravitation were already foreshadowed, though not as yet formally announced. This great success had generated enthusiasm and inspired confidence in future effort. Never was there greater activity of mind, or more vigor and originality of speculation. Not in physical science only, but in every department of intellectual effort, ambition was kindled and grand results were confidently expected. In the mere collision of opinions, in the conflict of opposing systems, many sparks of truth were struck out; everywhere were signs of energy and life.

It has seemed to me that the writings of these men would be a fitting introduction to a course of philosophical study. We need not fear that we shall thus be unprofitably detained in groping over the history of the past, digging up the dead bones of dogmas and systems that have passed away and of obsolete controversies. Philosophy, it is true, repeats itself in each succeeding age, — under new influences perhaps, with a different bias, and with tendencies and applications that are often entirely novel. But the groundwork is always the same, the old problems and questions are perpetually recurrent, the same difficulties and stumbling blocks impede our progress, and the answers, the attempted solutions, are found along the old lines of inquiry. Philosophy is uniform, because it is founded on the unity of human nature. Curiosity is excited by the same objects, the old doubts and fears start up afresh, and we try the former paths of escape from the same laby-

rinth. There is not a question now agitated between the rival schools of speculation in our own days, either by Mill and the Positivists on the one hand, or by the German Transcendentalists on the other, which does not find its prototype in the discussions of the seventeenth century, and even much farther back, in the Academy, the Porch, and the Garden of the Greeks. Hamilton and Mansel repeat Pascal. Mill follows the same track with Hobbes and Locke. Kant is largely influenced by Leibnitz; Fichte's motto is the old Cartesian *cogito, ergo sum;* and Schelling is a reproduction, with modern improvements, of Spinoza. Modern astronomy will sooner be emancipated from Copernicus and Kepler, than modern philosophy from its teachers and guides of two hundred years ago.

This is no confession of weakness or plagiarism on the part of our contemporaries. The repetition is often unconscious; little is borrowed, and no attempt is made to establish systems or opinions on the mere authority of the past. The coincidence is that only which necessarily results from the sameness of subject, the unity of human nature, and the common purpose in view. "It is not in Montaigne, but in myself," says Pascal, "that I find all which I read in his book." Always, also, the issues are colored and diversified by the ever changing circumstances of the age. The theme is old, but it is repeated with a thousand variations, and is applied and adapted to the protean forms of literature, and to the constant progress of physical science. The empiricism and positivism of Hobbes are necessarily unlike those of Comte and Lewes, because, in the interval between them, whole sciences, like biology, geology, and political economy, have been constructed and largely developed. These large additions to our stores of knowledge have not only supplied new evidence and illustrations bearing on old problems, but have affected the whole current of philosophic thought.

If we lose something of the freshness of modern inquiry by going back to the philosophy of two centuries ago, we gain by taking up questions nearer their source, when they were presented with greater purity and simplicity. Already we are falling too much under the direction of the schools of thought of our own day. What we have to dread is the authority not so much of the past, as of the present, — the overshadowing influence, the prestige, of great names and European reputation. Great distance affects the imagination and cows the intellect even more than great antiquity. The best discipline for enabling us fairly to

think our own thoughts is to escape from the heated discussions of the hour, the glare and turmoil of the work actually going on around us, and go back to study essentially the same questions under the softer light and still atmosphere of a former age. The spirit of partisanship is rife among us, not only in politics and religion, but in what should be the calm domain of science and abstract thought. We take sides too eagerly in a number of hot disputes, where the combatants apparently think more of triumphing over their opponents than of the progress of discovery or the interests of truth. Some of our *savans* seem more ambitious to be accounted hard hitters, than to be first in peaceful victories over ignorance and sin. The taste for these gladiatorial exhibitions has been fostered by the unhappy transference of the arena of contest to periodicals weekly or bi-monthly, and even to the newspapers, where the shouts of a mob are the guerdon of victory. It is a relief to go back to a century in which the war of words was conducted only in folios read by the erudite few, and of which the personal animosities have long since been buried.

But is not the admission now made a hazardous one? What profit, it may be asked, can there be in constantly grinding the same corn over again in the old mill? Or what gain in repeating the labor of Penelope, forever weaving and unravelling the same web? None at all, we may frankly answer, if the only object in life is to be fed and clothed. To adopt the language of Mr. Wallace, "the very terms in which Lord Bacon scornfully depreciated one great result of philosophy must be accepted in their literal truth. Like a nun, a virgin consecrated to God, she produces no offspring; she bears no fruit." The question which jesting Pilate addressed to our Saviour, and did not wait for an answer, "What is truth?" has not been answered yet, and probably never will be. But is there no advantage, then, in the endeavor to find an answer, though it be announced only with a stammering tongue? The problems with which we are even now occupied were problems in the days of Thales and Xenophanes — in the very infancy of the human race; they are unsolved yet, and many of them are perhaps insoluble. But what of that? Philosophy, as its very name imports, is not so much truth, as the search after truth. Hamilton with good reason quotes Seneca, *sordet cognita veritas;* the truth already known is already of no account, as it no longer enters into the activity of intellect, but only cumbers it with passive accumulations. The wealth, political economists tell us, which is literally locked up, only rusts or

rots; and we might as well put dried leaves or slate stones in its place. It is really of use only when it is in the form of capital, constantly changing its form, circulating from hand to hand, and thereby keeping up the industry and life of the whole community. So is it with knowledge. Truths already found out and demonstrated, and then duly classified and ticketed, so as to be stored away in books or in the pigeon-holes of memory, are really unproductive and dead wealth, serving no purpose but to pamper the vanity of its possessor. A large portion of it is voluntarily forgotten, for it is registered in books, and with the aid of catalogues, indices, and *vade-mecums*, we know where to find it. "We cannot be too often reminded," says an eminent empiricist, "that the really great men, and those who are the sole permanent benefactors of their species, are not the great experimenters, nor the great observers, nor the great readers, nor the great scholars; but the great thinkers. Thought is the creator and vivifier of all human affairs. Actions, facts, and external manifestations of every kind, often triumph for a while; but it is the progress of ideas which ultimately determines the progress of the world. Unless these are changed, every other change is superficial, and every improvement is precarious." The world already has more facts at its command than it knows what to do with. The mind, like the body, can easily get food enough; what it craves is activity, — exercise and a good digestion. The naturalists, in respect to the mere materials of their science, are already suffering from the embarrassment of riches, and so are beginning to think that there is something better to do than to travel to the ends of the earth in order to add one or two new species or varieties to a list already numbering about one hundred thousand, carefully laid away and drying up in herbariums. In our own day and neighborhood, an earnest advocate of what are called "utilitarian studies," frankly confesses that "the boundless nomenclature of natural history bids fair to exhaust the resources of all languages, as it has already done of most brains that have set about its amplification and its reduction to use."

I am not decrying the proper worth of such collections. They have a use, though it is a subordinate one. Like encyclopædias and dictionaries, they are good for reference, — that is, to aid inquiry. They are serviceable, also, so far as they suggest new questions or feed the discussion of old ones, — so far as they stimulate and keep up research. But the means must never outrank the end. Always what is of highest moment is the search, the

endeavor, the question not yet answered, the problem not yet solved, and, it may be, insoluble.

But why seek to estimate the loss or gain from an undertaking which at any rate is inevitable? Men have been engaged in the pursuit of speculative truth ever since they began to think, though voices have never been wanting to admonish them that the end was unattainable. But the warning was unheeded, for it is self-contradictory. Aristotle long ago remarked, that we are compelled to philosophize in order to prove that philosophy itself is illusory and vain. Skepticism is as much a speculation and a system as dogmatism; either is a nullity, if it does not rest on a philosophical basis. How happens it, that the endeavor which is always baffled has yet been constantly repeated for the last three thousand years? The only possible answer is, that the effort itself is so irresistibly attractive that it must be reckoned a necessity of our nature.

First principles and ultimate principles mean precisely the same thing, the nominal difference between them arising merely from that end or aspect of the subject which happens to come first into view. Hence it is that every science, either in its initial steps or its final results, leads us infallibly to those higher truths, those laws of broadest generalization, those necessary and universal ideas, with which philosophy is specially concerned. Hence is it that the adepts in any of the special sciences never come to a full understanding of their own subjects of inquiry without encroaching upon metaphysical ground; and even our physicists find themselves studying and teaching metaphysics unawares. The ideas of space and time form the groundwork of mathematics; those of substance and causality enter into every investigation of physics; personality and obligation are conditions of morals; right is the foundation of law, beauty is the essence of art, supreme goodness is the inspiration of religion. When the doctrine of morphology was first explained to Schiller, he immediately exclaimed, "This is not an *observation*, but an *idea*." These discussions about the Reign of Law, the Origin of Species (which is but another name for Cosmogony), Pangenesis and Epigenesis, the Conservation and the Unity of Force, Morphology, Homology, and Development, — these discussions, which have been so far popularized by the *savans* that already they are carried on in the newspapers, — all belong to the border ground between facts cognized by sense, and the higher truths, independent of experience, which can be grasped only by pure reason. In them mere inductive science gives place to the anticipations of the intellect; and Plato's subordination of

the sensible to the intelligible world, the world of pure Ideas, of typical and self-existent forms — τὸ ὄντως ὄν — is realized in the most advanced speculations of modern physical science. It is the Nemesis of ancient metaphysics following hard upon the steps of the Baconian reform.

At the outset of every enterprise, especially in undertaking a new study, we need to know which field it is that we desire to enter and survey, what are its precise limits in every direction, and what are its relations to the surrounding territory. Otherwise, we shall be continually throwing away effort, and each step taken may only lead us farther away from the goal. Nowhere is this difficulty more felt than in Philosophy, in respect to the definition and boundaries of which hardly any two writers or students are agreed. The word itself has a different use in England and America from what it has on the continent of Europe. Throughout Germany and France, it is at least so far restricted as to exclude physics, or the study of material things, whether organic or inorganic; and is limited to those inquiries which lead up to, or grow out of, the science of mind. At most, the physical sciences come into view so far only as the philosopher seeks to determine their relations with each other, and thereby their filiation, interdependence, and proper classification in a universal scheme of human knowledge; and even this is more properly a special philosophy, a philosophy of the sciences, than Philosophy itself, in the abstract. Hence we have the seeming contradiction and absurdity, that Comte and his followers write voluminous and ponderous works, one leading purpose of which is to prove that Philosophy as such is impossible and null, a delusion and a nonentity, consisting of

> "Windows that exclude the light,
> And passages that lead to nothing."

And the very name of these gigantic treatises, which remind us of mediæval folios, the name borne on their title-pages and reiterated in every chapter, is "The Positive Philosophy." So true is it, as I have already said, that Philosophy itself is inevitable, a necessity of human nature.

In the English language, unluckily, philosophy means almost anything, — from a philosophy of the absolute down to a philosophy of gymnastics, of shipbuilding, and of cookery. Even our physicists till very recently had no name for their own science but "Natural Philosophy," — the very thing which it is not, and, since the Baconian reform, does not even pretend to be. Hence the

sarcasm of Hegel, that Socrates indeed brought down philosophy from the clouds; but the English have degraded her to the kitchen.

Now we shall at least make some progress towards clearing up this confusion, if we relegate at once all these *special* philosophies to the special sciences and arts which they constitute or enter into. *Suum cuique.* The philosophy of law is a constituent part of the science of law, either its foreporch or its *adytum*, the interior shrine of the goddess. In like manner, the philosophy of medicine is a part of the science of medicine; and I think it would have conduced much to the peace both of state and church, if it had been admitted on all hands that the philosophy of theology is a part of the science of theology.

When we attempt to go further than this, and to make our definition precise and adequate, we encounter a formidable difficulty. A definition presupposes a knowledge of the nature and limits of the thing defined, and as such would seem to be the latest result of philosophical inquiry, instead of an introduction to it. We must proceed on trust then, accepting a definition only provisionally, and leaving it to be verified by the results of our subsequent studies. A preliminary question concerns the relations of our subject to two cognate sciences, on which Philosophy in great part is based, if indeed it does not comprehend them. Taken in its broader sense, Philosophy includes both Psychology and Logic, and by some thinkers is limited to them, it being denied that there is any practicable ground beyond, into which research can be carried with any hope of success. Others maintain, and it is my own opinion, that these are preliminary or derivative sciences; and that Philosophy properly so called, or taken in its narrower sense, stands beside them, both giving and receiving aid, and yet having a perfectly well defined province of its own. We must begin, then, by ascertaining the purpose, scope, and limitations of these two allied subjects.

The name given by John Locke himself to his great work, is "An Essay concerning Human Understanding." Observe the omission of the definite article, which could not have been accidental, as it is adhered to in all the editions published during his lifetime, and his smaller posthumous work, purporting to treat "Of the Conduct of *the* Understanding," relates to a very different subject. This title of the Essay is generally misquoted, and, as it seems to me, misunderstood, by nearly all later English writers, as an Essay on *the* Human Understanding. The difference

may seem a small one, but it is by no means unimportant! "*The* Human Understanding" is a synonyme for the human mind, and in an essay on it we should expect to find a treatise on Psychology; that is, an analytical account of our mental faculties, and an enumeration of the phenomena of consciousness, together with the laws to which these phenomena appear to be subject. This science is properly designated by Dugald Stewart, "the experimental science of the human mind," though its more common name since his day is "Psychology." All parties, even the skeptics and the materialists, admit that this is strictly an inductive science, based on actual observation, and capable of being treated with strict regard to the Baconian method. John Stuart Mill says of it, "Psychology, in truth, is simply the knowledge of the laws of human nature. If there is anything that deserves to be studied by man, it is his own nature and that of his fellow men; and if it is worth studying at all, it is worth studying scientifically, so as to reach the fundamental laws which underlie and govern all the rest. There are certain observed laws of our thoughts and of our feelings which rest upon experimental evidence, and, once seized, are a clew to the interpretation of much that we are conscious of in ourselves, and observe in one another. Such, for example, are the laws of association. Psychology, so far as it consists of such laws, is as positive and certain a science as chemistry, and fit to be taught as such." Among writers of our own day, I know only two, Comte and Mr. De Morgan, who have directly denied the possibility of such a science. Their objection rests on the assumed absurdity of supposing that the same faculty can be at once both subject and object, — observer and observed, — can at the same moment manifest the phenomenon, and observe and analyze such manifestation. In regard to introspective observation, says Comte, "nothing can be more absurd than the supposition of a man seeing himself think." And De Morgan, with his usual attempt at smartness, warns the student of such a science, "when he tries to look down his own throat with a candle in his hand, to take care that he does not set his head on fire." In reply, we need only appeal to the notorious fact, be it comprehensible or not, that every man is conscious of what is passing in his own mind, and often attempts with good success to render an account of what he sees there.

Be this as it may, it is certain that Locke's Essay is not — what it has very generally of late been supposed to be — a psychological treatise on *the* human understanding. Psychology, as a distinct

science, had not come into existence in the seventeenth century. It had not yet been separated from metaphysics, with which, down to a much later day, it was always confusedly blended. Its separate existence cannot be traced farther back than to the writings of Hartley and Reid in England, or of D'Alembert and Condillac in France. The great thinkers of the seventeenth century never dreamed of such a science; and the fragments of psychological analysis which we find interspersed in their writings, as subsidiary to their main purpose, are brief and imperfect. Locke's "Essay concerning Human Understanding" (without the article), is an inquiry concerning human *knowledge*, — its origin, nature, and certainty. Hence it is almost exclusively metaphysical. The ideas of which it treats are not considered chiefly as phenomena of the mind, but as elements of cognition. His question was not, What do we think and feel, and what laws govern the succession of our thoughts and feelings? — but What do we know? Whence comes our knowledge? Is it born with us, or comes it from experience? What are the boundaries that limit it, and how far is it trustworthy?[1] Of course, the attempt to answer these questions involved and required a certain amount of psychological observation and analysis; but this only by the way, and as a means for a higher purpose.

We see plainly, then, how Psychology may be defined, and how easily it may be kept within its proper limits. Here we are concerned with the human mind as a subject of observation and experiment, and as the supposed seat or origin of certain phenomena which admit of number, arrangement, and classification. These phenomena are often complex, and need to be analyzed and reduced to their simplest elements. Moreover, they are not produced fortuitously or at random, but are subject to fixed laws, more or less obvious, which may be definitely expressed and verified by experiment. Avoiding all hypotheses, then, as to the inmost nature or real essence either of mind or matter, it may be said that Psychology treats of those properties or facts which we

[1] "This therefore being my purpose, to inquire into the original, certainty, and extent of human knowledge, together with the grounds and degrees of belief, opinion, and assent; I shall not at present meddle with the physical consideration of the mind, or trouble myself to examine wherein its essence consists, or by what motions of our spirits or alterations of our bodies, we come to have any sensation by our organs or any ideas in our understandings. . . . . It shall suffice to my present purpose to consider the discerning faculties of a man as they are employed about the objects which they have to do with." — Locke's *Essay*, Book I., chap. i., § 2. See also § 3 of the same chapter.

This also is precisely what Kant proposes to accomplish by his *Critique of Pure Reason*, wherein he appears as the continuator and rival of Locke.

learn directly from consciousness; physical science, of those which we know through the senses.

A single illustration may here be given of the characteristic features of the two different classes of phenomena now referred to, by means of which they can be clearly distinguished from each other. I refer to the opposite effects of repeated and continuous use on matter and mind. Every material contrivance, every tool and machine of man's device, deteriorates by use. All wear of the engine more or less wears it out. Every cut made with a knife dulls it. Each time the watch ticks, it becomes a less perfect measure of time. Every discharge of a gun increases its liability to burst. Every foot which a locomotive travels impairs its machinery, and grinds down the rail on which it moves. All our material implements, if not frequently mended, soon become unserviceable.

Not so is it with any exercise of mind. Here, use refines and invigorates, disuse weakens and destroys. It has even become a proverb that practice makes perfect, habit renders all things easy, work becomes play. The practised accountant sums up long columns of figures so swiftly that the result appears to come by intuition, while the school-boy boggles in attempting to add nine to five. The trained musician attains a delicacy and precision of touch which appear miraculous. From the quickened apprehensions of hearing and feeling, the blind man learns almost enough to compensate him for the loss of sight. The juggler and the skilled mechanic attain a sleight of hand which no quickness of eye can follow. Those only who have educated the memory by repeated effort can know how quickly it may act, or how vast may be its stores. Each faculty in turn may be so improved by use that it seems to dominate and take possession of the whole mind. Accident or sickness, it is true, may impair and even disable the mental faculties, or, as is more probable, may obscure or hinder the outward manifestation of them; but in the normal exercise of their functions, they never need mending or repair. On the contrary, all our spiritual powers gain so much by exercise and cultivation here, as to promise a future boundless development in some higher state of being.

Psychology, since it depends on observation and experiment, may properly be ranked with the physical sciences. But Philosophy, in the strict sense of the term, as it abandons altogether these empirical modes of research, because it looks to questions lying behind or above them, — because, as Kant says, it has first to

consider what makes experience possible, — is often named metaphysics. I hold that the definition of philosophy thus understood was correctly given by Locke and Fichte; that it is what the Germans call *Erkenntnisslehre*, — the Theory of Knowledge considered simply as such, or in the abstract, irrespective of the things known. Hence it includes a discussion of the origin, the conditions, the limits, the principles, and the certainty of human knowledge; and this enumeration of its parts supplies at once a division of the subject, and determines the order in which these parts should be treated. Every other science has its special object, or class of objects, to the investigation of which it is exclusively devoted. Thus, arithmetic treats of number, geometry of position and extension, physics of the general properties of matter, and psychology of the phenomena and the modes of action of the human mind. But each of these special sciences presupposes that man has the power of acquiring knowledge of himself and other things, which power, indeed, has its peculiar nature, its conditions, boundaries, and imperfections, but when duly exercised within these limits, is more or less trustworthy. Because Philosophy treats of knowledge simply as such, it is technically called a *pure* science.

Wissenschaftslehre — the doctrine or theory of *science* — is the name given by Fichte to his exposition of a system of metaphysics. But there is a difference between knowledge and science, inasmuch as one of these terms is generic, and the other specific. All science is knowledge, but all knowledge is not science. Science is that portion of knowledge which has been reduced to order, precision, classification, and method; and it aims at, though it does not always accomplish, completeness. I may *know* many things individually, though wholly ignorant of the *science* of those classes of things to which these individual things belong. Hence Fichte's definition is open to criticism, in so far as he limits metaphysical investigation to *science*, which is possessed by comparatively few, instead of extending it to *knowledge*, which, whether more or less complete, is common to all. This does not mean that Philosophy itself is unscientific; quite the contrary. The doctrine or theory may be eminently scientific, while the subject-matter of that doctrine or theory, for the very reason that it is universal or common to all men, is generally vague, immethodical, and unscientific. Perhaps the distinction will become more clear if we state that Psychology is the analysis of the cognitive and other faculties of the human mind; Philosophy or metaphysics is the analysis of the cognitions themselves considered as already formed. As all the

other sciences are particular, each being the knowledge only of a special and limited class of things, while Philosophy alone is general, its object being knowledge in the abstract, or as such, irrespective of the things known, it is obvious that Philosophy cannot borrow its principles from the other sciences, but must impose its own principles upon them. Its function is to make laws, and not to receive them, except from its own dictation. The truths of any particular science must conform not only to the special characteristics of the limited class of objects with which it deals, but to all the limitations and conditions which result from the very nature of knowledge considered simply as such. It is the business of Philosophy to determine these *universal* limitations and conditions, and to determine them from the nature of knowledge *per se*. To borrow any of them from a special science would be illogical, as these would be vitiated by the special conditions of this particular science. Hence Philosophy has sometimes been appropriately called the science of first principles.

We have examples of *pure* science both in Mathematics and Logic. The former is the science of *pure* magnitude, or of measurement and numeration irrespective of the things measured and numbered; the latter is the science of *pure* thought, — that is, of thought irrespective of the subjects which we are thinking about. This is Logic as understood by Aristotle and Kant; that is, the science of the necessary laws of pure Thought, or of thinking in the abstract.

Throughout the Middle Ages, by a great misunderstanding of the meaning of Aristotle, Logic was held to be the science, or rather the art, of argumentation, and hence as a means (certainly a very poor one) for the discovery of truth. This perversion of its proper signification and use continued through the seventeenth, and even the greater part of the eighteenth, century; and was the chief reason why it degenerated into a mere jargon of technicalities, and came to be almost universally decried and neglected. A mere art of disputing would be a poor organon for finding out new truths; for, as Locke remarked, we must know a thing first, and then only can we prove it syllogistically. A vestige of this mistaken purpose of the science still exists in what is sometimes called inductive Logic, sometimes the logic of discovery and invention, as treated by Lord Bacon, Dr. Whewell, and Mr. Mill. If this be understood as a merely speculative science, a *rationale*, or generalized analysis, of the successive steps of procedure whereby physical laws are discovered and processes invented, it is a legiti-

mate investigation, though one of no practical utility. But regarded as an art, as a system of rules to direct future effort, it is certainly as futile as the mere brandishing of syllogisms would be for the discovery of abstract truth. In the physical sciences, the process of invention is essentially tentative: one guess is tried after another, just as in solving a Chinese puzzle; and success finally depends on a union of good luck with fertility of imagination, quickness of insight, and an indescribable tact, which can no more be imparted or improved by a system of rules than the art of lyric poetry. Successive hypotheses may be verified, indeed, by mathematical computation, — by a precise determination of the quantitative relations of the phenomena which are studied; that is, we may try on one coat after another, and determine by measurement which comes the nearest to an exact fit. Just so in regard to Pure, or what is sometimes called Formal Logic. Its purpose is only to teach us how we always *have* thought, and not any new mode of thinking, or new precautions through which we may avoid the errors to which we were formerly liable, or by which we may discover truths that were formerly unattainable.

When Logic is said to be the science of Thought, it is evident that the word "Thought" is not taken in the loose and vague sense in which it is a synonyme for any action whatever of the human mind. A man does not properly *think* when he merely receives some one impression through a single sense, such as red light, a sour taste, or a shrill sound; nor when he is merely conscious of some one affection of his mind, such as hunger, pain, or joy. Each of these is only a single presentation to sense, an intuition of our receptive faculty, the mind exerting no conscious activity in it, but passively receiving an impression as perceived *now* and *here*, and *single*, without reference to any thing else, and without any distinction of parts or attributes. We must suppose the lowest brute, as an oyster, if sentient, to be capable of such intuitions; and what is received in them may be called the mere *brute* matter of knowledge; but it is matter without form, and so not properly a cognition, but only the rough material, to be subsequently worked up into knowledge. To complete the process, the aid of the thinking or elaborative faculty — *i. e.* the understanding — must be called in. We *compare* this impression with some one received before, recognize its likeness or unlikeness, partial or total, to that former object, analyze it into its parts and attributes, and so refer it to a class of things formerly known, and thereby give it a name, — the common name of that class. In short, we

reflect upon, or *think*, the object long enough, in common phrase, "to take it in," or know it for what it is. Comparison and the discernment of relations may be said to be the essence, or common element, of pure Thought; for it is only by comparing one sensation, or one object, with others, that we can consciously recognize it, through discriminating those respects in which it is similar from those in which it is unlike them; and so *know* it, either as a red or blue color, a soft or hard object, a leaf, an apple, or a stone. Sensation or intuition gives us only individual impressions, — this one feeling and no other. On the other hand, Thought, and language, which is the expression of Thought, has to do only with groups or classes of things. The imagination, like the senses, deals only with particular intuitions, or individual things. If I imagine a color, sound, or object, it is always single and definite, this one shade of red, that note of the canary or robin, that particular engraving; a group or class, or rather the notion which my mind has of a group or class, cannot be imagined; it can only be *thought*.

It was long ago remarked by Hobbes, *semper idem sentire, ac non sentire, ad idem recidunt*, — always to have the same sensation, is precisely equivalent to having no conscious sensation at all. Thus, if I pass out of strong light into an utterly dark room, I feel or am conscious of that darkness, through its contrast with the perception of light a moment before; but if I were born in that darkness, I should have no conscious perception of it, no sense of my infinite loss. The same odor always in the nostrils is no sense of odor at all. He who has lived nowhere but on the very borders of Niagara never hears the low thunder with which the waters constantly fill the air; but let him go away, though only for an hour, and when he returns he will instantly become sensible of it. State this fact in general terms, and we have this law: — *Thought* is necessary to make even feeling or sensation to be *conscious* feeling or sensation; and Thought can take place only through discrimination, or the perception of difference. Now such discrimination is the cognition of a quality or attribute (called in Logic, a *mark*), whereby *this* is distinguished from *that*. Hence Esser rightly gives as one definition of Thought, that it is representing an object to ourselves through its distinctive marks. We *conceive*, and thus *know*, an object only through grasping together into unity its separate qualities and attributes, which make it what it is, by distinguishing it from what it is not. If it has no such attributes, there is nothing to be grasped together — nothing to be thought of; it is an impossible conception — a nonentity.

I should not dwell so long on this point, if it did not manifest so clearly the utter futility of that theory which resolves all our knowledge into sensations and groups of sensations run together, through a process of mental chemistry, by the power of association. True, all knowledge *begins* with sensation; in this admission, Locke and Kant are at one. A foreign impulse, a breath of air from the world without, is necessary to wake the mind to conscious life. But the sensation is so far from constituting the knowledge, that it does not even enter into it, or form any portion of it. Sensation and the consciousness of sensation, as we have seen, are not the same thing. The proper beginning — that is, the first step — of knowledge is consciousness; for the very phrase, unconscious knowledge, is a contradiction in terms. Conscious knowledge does not grow out of the first sensation, for that is unconscious; nor even out of the second sensation; but out of a perception of the *relation* of the first sensation to the second. For this relation is *thought;* it is a true cognition of difference, and thereby a cognition of a distinctive mark or attribute; and such perception constitutes knowledge properly so called. A breath of air wakes the instrument within us to music; and yet the music is not in the breath, but in the instrument, which was previously constituted and attuned for its own peculiar harmonies.

Thus far I have explained the action of Thought only in its first form or process, namely, in conception, or what was called by the older logicians, simple apprehension. But there are two other forms or processes of pure Thought, namely, judgment and reasoning, or inference. Judgment is simply affirmation or denial; we judge when we declare that A is B, or A is not B. These two formulas are the universal expression of judgment; that is, every particular judgment, whatever may be its matter, must have just this form, and no other. The mere succession or coëxistence of two thoughts in the mind does not constitute a judgment. I may think first of *man*, and then of *animal;* but no judgment takes place until I affirm in thought a perceived relation between the two, or until I think *man* is *animal.* And the effect of this act of judgment is to reduce in thought the two terms to one, — a single concept of the mind or object of thought, namely, *animal man*, or *human animal.*

And this brings to light a chief function of the understanding or thinking power; it is the unifying faculty in our minds; it reduces many to one. As we have seen, conception is the act of grasping together two or more attributes into the unity of thought which we

call a single concept. In like manner, judgment reduces its two terms to one; by affirming the predicate of the subject it forges them into one thought. Inference or syllogism, the third act of pure Thought, also shows the tendency of the mind to unity, since it sums up the results of two judgments and three terms in a single conclusion.

Now the distinctive feature of Logic as a science is its exposition of the necessary laws which underlie and govern these three processes of Thought. I call them *laws* in the strictest sense of that word. They are not mere statements of general facts, or empirical laws, like those in psychology and the natural sciences, objects and events being thrown together into groups according to their relations of similarity or mutual dependence. Neither are they practical maxims, of limited and contingent applicability, but considered useful for the conduct of our powers and the guidance of research. Such maxims are laid down in abundance by writers upon rhetoric and what is called inductive Logic, though I suspect no great good has ever resulted from any conscious attempt at conformity with them. But these laws of pure Thought, with which we are now concerned, are as absolute as the axioms of geometry, which indeed they closely resemble. In one sense, they contain nothing new, as we have been acting upon them all our lives; though, perhaps on account of their very obviousness, they have never been explicitly stated or drawn out into distinct consciousness. They do not admit of proof, as their truth is presupposed in every act of reasoning, and therefore no argument or proof is possible, unless their validity is taken for granted. The laws of pure Thought are necessities of Thought, since a conscious violation of them is impossible. It is true, that in what Leibnitz calls the *symbolic* use of language, whereby, in order to shorten the intellectual process, we substitute words for thoughts, employing them like algebraic symbols without spreading out their meaning before the mind, we may, through hurry and carelessness, violate these fundamental laws. But in such cases, as soon as we return upon our steps with an effort to think clearly and distinctly, it is immediately perceived that we have been misled, not merely into erroneous or defective thought, but into that confusion which is really a negation of thought, that is, an absurdity and a contradiction.

Some of these necessary laws of Thought have a necessary bearing upon the great doctrines of theology and philosophy. Such is one that I have attempted to set forth, — the law, namely, that conception or simple apprehension, since it is a perception of relations,

is possible only through plurality and difference. It is only an application of this law to say, that no definition can be made, that is, no thought can become definite, except by limitation and negation. Its scope is determined only by setting strict boundaries which it cannot pass, and we set forth fully what it is only by ascertaining what it is not. *Omnis determinatio est negatio.* If we give to any object of thought parts or attributes, and no definition is possible without one or the other, we negative its unity. This law of thought is the occult principle which, as we shall see hereafter, determined all the peculiarities of the system of Spinoza. It lies at the root of all those discussions about the conceivableness of the Infinite and the Absolute, and the objective reality of space and time, which have been so rife in our own day. It gives the logical consecution and semblance of validity to the arguments of the Pantheists, which have caused their theory to appear, not as the wild and extravagant speculation that it really is, but as the most orderly and thoroughly reasoned scheme of the universe which the human intellect has ever framed; which has imparted to it, in fact, the strange fascination that it has seemed to possess in every age that has developed any power of abstract thought.

CHAPTER II.

DESCARTES.

RENÉ DESCARTES was born on the last day of March, 1596, at La Haye, a small town in France situated between Tours and Poitiers. He was of a noble family, which derived its territorial name and dignity, Du Perron, from a small landed estate which it formerly owned in the province of Poitou. He was educated at the newly founded College of La Flèche, under the direction of the Jesuits; but he showed no liking or aptitude for any of the sciences which they attempted to teach him except pure mathematics, which he studied with great assiduity and success. As for Philosophy, he found nothing in it which was not subject to dispute, and judged that it must be entirely reformed before it could become a foundation for the other sciences. Before attempting such a reform, however, he thought best, by means of foreign travel and by following the profession of arms, to study the great book of the world. He served for some years, first under Prince Maurice of Nassau, and afterwards under the Elector of Bavaria; and it was while engaged in garrison duty, according to his own account, that he invented the earlier portions of his system of philosophy. After quitting the army, he lived for three years in Paris, where he sought the society rather of people of fashion and men of the world than of the learned, and did not even addict himself to books. When his plans were ripe, however, he found a quiet retreat in Holland, which was then an asylum for free thought, and there pursued his researches into science with great ardor. Still he made little use of books, but devoted himself rather to scientific experiments and to patient meditation. He entered into correspondence, however, with the eminent men throughout Europe who were engaged in similar pursuits with himself, and soon acquired high reputation among them as an original and profound thinker. After he was fifty years old, he went to Sweden at the invitation of Queen Christina, and died there, at Stockholm, in February, 1650.

It is common with some writers at the present day to regard Descartes as a skeptic, and the merits of his philosophy as a proof of the excellence of skepticism, because it is founded upon a system of universal and systematic doubt. On the contrary, he is the prince of dogmatists, and of self-sufficient, methodical, and consecutive thinkers. The true skeptic, as Descartes himself remarks, doubts for the sake of doubting, and therefore ends, as he began, with doubt. On the contrary, I doubt, he says, only in order to believe. "My whole design looks to the attainment of certainty; and I push aside the light and movable earth and the quicksand, only in order to find the solid rock or clay upon which a foundation can be safely built." The doctrine which he sought to establish was the certainty of human knowledge. His chief fault was intellectual arrogance. He was not content simply to point out a method of inquiry, by following which other minds and after ages might, through combined effort, accumulate by degrees the necessary materials and slowly build up the structure of truth. That was Bacon's plan. Descartes proposed to do the whole work himself. Bacon invented a method, while Descartes erected a system. He assumed to create at once by independent research a theory of science, which should rest, like mathematics, on indisputable axioms or first truths; with all the parts, as in mathematics again, duly arranged each in its proper place, and fitly jointed and bolted together, so as to bid defiance to decay or change. He had observed, he says, that works executed by one hand were more regular, and the parts more harmonious and better fitted to each other, than those which united the contributions of different minds and successive centuries. The political constitution of Lacedæmon, for instance, in his opinion, excelled that of the other states of Greece, because it was the work of one man, and came perfect from the conception of a single artificer. "Instead of choosing, therefore, among the opinions of others, I thought it right to form an opinion for myself."

This language fully justifies the eulogy which has often been bestowed upon him; that the characteristic of Mediæval Philosophy was submission to some other authority than that of reason; while Modern Philosophy accepts reason as the only authority; and it was Cartesianism which brought about this decisive change. There would have been little merit in such an assumption of independence at a later day, after it had become the fashion; but it was an unprecedented step at the beginning of the seventeenth century.

Descartes had a method, and devoted a whole treatise to its exposition and defence; but it was not the distinctive feature of his philosophy. For this, we must look to its application, to the doctrines evolved from it by a clear-headed and inventive thinker. Speaking briefly, it was the deductive, geometric, and *a priori* method. He did not reason inductively, from facts upwards to laws or causes, but deductively, from first truths or self-evident principles downwards to observed facts. More particularly, he laid down four rules: (1.) To admit nothing except upon clear and certain evidence. (2.) To proceed analytically, resolving each problem into as many distinct questions as possible. (3.) To consider all objects of inquiry in a fixed order, beginning with the simplest, and rising by degrees to the more complex and abstruse; (on the ground of this aphorism, it has been maintained, and with good reason, that he is the proper originator of that scheme of the classification of the sciences which was first developed by Comte.) (4.) To employ so much circumspection and exact calculation as to make sure that nothing essential had been omitted. Obviously these are rules for the conduct of investigation and proof in pure mathematics. There was no great merit in the mere enunciation of them, even at that early day. But to adhere to them with great closeness and fidelity in the exposition of a new theory of knowledge, a journey of exploration where he could be guided by no footmarks, since no one had preceded him, affords proof of no ordinary vigor and clearness of intellect.

The first, and perhaps the most difficult, thing to be done was to ascertain and establish the starting-point of the inquiry; to find some truth or fact which should be absolutely self-evident and unquestionable, and still be fruitful, so that all truths subsequently elicited might be shown to depend upon it and be proved from it by rigorous filiation of logic and doctrine. He needed a fulcrum for his lever; and the way to find it was to ascertain by actual experiment whether the most comprehensive skepticism could overthrow every thing, or would leave something still upright amid the general ruin, something which could not be doubted or denied, without an evident contradiction and absurdity. I resolved, he says, to reject as absolutely false every thing which was subject even to the smallest doubt. Every thing which I have learned came either from the senses or the intellect; and as the senses often deceive us, falsely reporting both the visible and tangible qualities of things; as we often imagine what is not, and dreams present mere fancies for realities; as the understanding often goes

astray, and we blunder about even the simplest matters in geometry; as it is supposable even that some malignant power has so got the control over our minds as constantly to hold up truth for falsehood, and the reverse, I will no longer believe in anything; I will deny the validity of mathematical evidence, and the existence of a God, of external objects, of my own body, and even of myself. Does anything remain? Yes! Thought. This very doubt and denial exist only so far as they are thought. Thought is present even in dreams. Error as well as truth, imagination as well as reality, must be thought, or they do not exist. To think the non-existence of thought itself is a manifest contradiction and absurdity.

Here we have a first principle, then, and it is not only unassailable, but fruitful. *Cogito, ergo sum.* The reality of the thought necessarily involves the existence of the thinker. Two steps, then, are already taken and solidly planted. If there are any truths of fact or concrete existence, as distinct from the mere relations of abstract ideas, — truths which skepticism itself cannot doubt, these are they. On this subject, the philosophy of the last two centuries and a half has not advanced an inch beyond Descartes, nor rendered nugatory the smallest portion of his work. On these two most certain of all propositions depends the certainty of all other affirmations that can be made. The one cannot be denied without self-contradiction, that is, without violating the primary axiom of pure thought, that all thought must be consistent with itself; thought is known, because both knowledge and skepticism are thought. The other, my personal existence, is at once the type of all reality, and the measure of all certainty. The contrast between the real and the apparent, as it is a relation between them, must have a *fundamentum relationis*, or a standard through which it can be thought. This standard cannot be found in the apparent, as this is the mere negation, the opposite, of the real. There must be, then, a standard or type of reality; and this can be nothing but the Ego, which thinks the relation, and without which, consequently, the difference between the real and the apparent could not even be thought. It is also the criterion and the measure of all certainty, as well in the apprehension of the vulgar as in the reasonings of the learned; for the common remark, "I am as sure of it as I am of my own existence," expresses the strongest conviction of which the human mind is capable, and that to which all other assurance is referred.

Cartesianism is the proper origin and starting-point of all Mod-

ern Philosophy, both because it first erected the standard of independence of the authority of all former times and thinkers, and because these two primary data of Descartes have been borrowed from him by all subsequent system-makers to serve as the foundation stones of their own doctrines. Fichte and all other proper Idealists or Egoists of the last two centuries found their philosophy upon *Cogito, ergo sum.* And it may fairly be added that Schelling, Hegel, and the whole school of those who have upheld the doctrine of Absolute Identity, and have endeavored therefrom to construct a philosophy of the Absolute, have begun with the Cartesian datum of pure or blank thought, and have assumed to follow the equal and parallel development of such thought in two directions, — into object and subject, nature and spirit, matter and mind.

But before commenting any further upon these primary truths, let us follow the subsequent evolution of the system by Descartes himself, in order to gain a connected idea of his philosophy as a whole. As yet we have not advanced beyond the internal world of consciousness, to which both thought and the Ego unquestionably belong. How shall we get beyond the Ego to the world outside of us, and reconstruct that trust in the testimony of the senses and in the deductive conclusions of the intellect which was swept away at the outset? The problem is ontological; how, from the two premises now gained, shall we demonstrate the objective reality of something external to ourselves, the existence of which may serve as a corner-stone to the whole remaining fabric of truth? There is but one such corner-stone, says Descartes; and that is, the necessary existence of a God, of an infinite and perfect being, to whom, because He is perfect in wisdom and goodness, we cannot attribute any intention to deceive his creatures. If his existence can be demonstrated *merely from the two points already established*, then we are justified in relying with full confidence on those faculties which He has given us. We can then trust the evidence of our senses and the conclusions of our understanding in all cases whatsoever in which they afford us *clear and distinct* ideas of their respective objects. *The veracity of God* is the only bridge over which we can pass from a knowledge of our own existence to an unhesitating conviction of the reality of things without us and the trustworthiness of our intellectual powers. How can we prove the being of a God merely from the knowledge of our own existence and of the thoughts or ideas which are present to our consciousness?

In its first and purest form, the ontological argument for the existence of a God, founded on the mere idea of such a being which is present to our minds, may be very briefly stated. Our idea of God is that of an infinite and perfect being, who is self-existent, *i. e.* who exists by a necessity of his own nature; for thus only is He distinguished from a finite being, whose existence is contingent or merely possible, since it depends upon some other power or person foreign from itself. God alone exists *per se*, since He is *causa sui* — self-caused; every other being exists *per aliud*. Necessary existence, then, is a part of the very idea of God; therefore He necessarily exists. Still more briefly: In the idea of a God are contained all the attributes of a perfect being; but necessary existence is one of these attributes; therefore God exists.

Two other considerations were added by Descartes, when he was pressed with objections by his opponents; but these seem to amount to little more than stating the same argument over again. Thus, it is a greater perfection, he argues, to be present in the idea that we form of him, and also to exist in reality, than to be merely present in idea; but the idea of God includes all perfections; therefore, this perfection also, that he really exists. This form of the argument may be best stated in St. Anselm's own words, since Descartes borrowed it from him. "Certe id quo majus cogitari nequit, non potest esse in intellectu solo. Si enim in solo intellectu est, potest cogitari et in re, — quod majus est. Si ergo id quo majus cogitari non potest est in solo intellectu, id ipsum quo majus cogitari non potest, est quo majus cogitari potest. Sed certe hoc esse non potest." Or thus: our idea of God is *ens realissimum*, — a being who includes all reality, or the highest kind of reality; then his reality is a necessary part of the mere notion of what he is.

This form of the argument, which is strictly *a priori*, was adopted by Descartes not only from the necessities of the case, because he had nothing but ideas to reason from, but from the analogy of reasoning in mathematics. As the geometer, he argues, when he looks closely, in the very idea of a triangle finds the consequent fact, that the sum of its three angles is necessarily equal to two right angles, so in the very idea of God is contained the fact of his necessary existence.

It is obvious, however, that this analogy is a very lame one. What the geometer discerns is an abstract truth respecting the relation of two ideas to each other. I have a notion of the three

angles of a triangle, and another notion of two right angles; and I perceive that these two notions, both of which are quantitative, perfectly correspond, or are equal in magnitude. Such reasoning has nothing to do with the fact of real or concrete existence. Going back to the substance of the Cartesian argument *a priori*, we observe that the fallacy in it consists in substituting the phrase "necessary existence" for "the idea of necessary existence." It is perfectly correct to say, that *the idea* of necessary existence enters into our complex notion of a God. But the reality does not follow from the idea, any more than the reality of a winged horse follows from my conception of such an animal; or, still more pertinently, than the actual presence of a perfect circle on the paper before me follows from the mathematical, that is, the perfect, conception of such a circle, which exists in my mind, and which, strictly speaking, has no prototype whatever in the outward universe. Real existence is the very opposite of ideal existence, and it is therefore a contradiction in terms to affirm that the former is contained in the latter.

Unable to answer this objection, Descartes took refuge in another form of the argument, or rather in a different argument, which is inductive indeed, and, as it seems to me, satisfactory, but by which he lost hold of every vestige of demonstrative reasoning *a priori*, and came down to the old argument from effect to cause, thus: —

There are, he affirms, three sorts of ideas in my mind. 1. There are adventitious ideas, which come to me from without, through the agency of the senses. 2. There are factitious ideas, constructed by myself out of the materials furnished by sense. 3. There are those which are native-born, original, or innate. Now among the ideas in my mind I find one of God, understanding thereby an infinite and eternal substance, immovable, independent, omniscient, and omnipotent, by whom I and all things that exist were created. Whence came this idea? Certainly not from the senses. These take cognizance only of what is finite, limited, imperfect, and contingent. The ideas in my mind are images or pictures, which may want something of the perfection that is in their archetype, but certainly cannot go beyond the magnitude and excellence of their cause. Moreover, it did not rise unexpectedly, creating a feeling of novelty or surprise, as the ideas of external things do when they strike upon my senses for the first time. Neither was it made by my own agency, for I can neither enlarge nor diminish it: — not the former, for it is infinite, and therefore cannot be increased; not the latter, since an idea of perfection

cannot be lessened, but can only be removed and another idea be substituted in its place. As the idea did not come from the senses, then, and is not factitious, it must be innate; it bears the artificer's own stamp put upon his work to show who made it. In fine, to adopt his own language, "when I turn my attention inward upon myself, I perceive that I am a being incomplete, dependent upon another, and reaching after something higher and better than my present state; and that He, on whom I depend, enjoys all the perfections towards which I only aspire,— enjoys them not merely potentially and to an indefinite extent, but in very truth and to an infinite degree. Now my nature could not be what it is, that is, could not possess this innate conception of the Deity, unless he actually existed, and possessed all those attributes which my thoughts can in no wise picture forth or comprehend, and marked by no defects."

Now we are not concerned with this argument in its theological, but only in its philosophical aspect, as portion of a demonstrated system of knowledge, or as a means of accrediting the human faculties, and of thereby rising from universal doubt to a successful search after truth. As such, it cannot be demonstrative and *a priori*, since matters of fact, or of actual concrete existence, can be made known only by direct intuition, or by reasoning from probable evidence, but cannot be demonstrated. We do know from direct intuition the existence of thought, and of our own personality or self. But surely we have no intuitive knowledge of the Divine existence; and any attempt to demonstrate it must be a failure, since there is no passage from an idea to a reality except by unfounded assumptions, — by smuggling into the premises facts not yet proved, or judgments which we have no right to consider as axiomatic. Descartes did not consider how difficult it is to revoke all our past opinions into doubt, and to present the mind as a *tabula rasa* for the reception of fresh and well accredited truth. To adopt his own language, it is not so easy to cancel all our preconceived beliefs as it is to burn one's own house down. Granting even the idea to be innate, it does not follow that God implanted it in our minds, but only that some cause, we know not what, must have placed it there; and not even this can be postulated, unless we assume the validity of reasoning from effect to cause, a principle which Descartes had not yet demonstrated, nor even noticed. As an inductive argument from experience, this reasoning affords us all the assurance that we need of the reality of the Divine existence, the evidence being of the same nature as

that by which we are convinced that all men are mortal. It is not, and it cannot be demonstrated, that I must die; but any one would be insane who should refuse to believe it. Descartes promised to lead us up to the fundamental truth of all religion by a new path, — to "nobly take the high *priori* road and reason downwards;" but after a little digression he conducts us back again to the old travelled way, where alone we can find sure footing, and reasons upward from effect to cause.

Indeed, the great defect of the Cartesian philosophy is, that it takes little notice of the idea of Cause, and does not disentangle or present to distinct consciousness the great Law of Causality, though the whole system unconsciously presupposes the validity of this principle, not only as a law of thought, but also as a law of things. Descartes saw only half of what Mr. Mansel calls the great metaphysical problem, "What is the origin and import of these two necessary conceptions, *Substance* as distinct from phenomenon, *Cause* as distinct from change; or rather, of these two different sides of one and the same conception, for Cause is but Substance in operation, as Substance is but Cause resting after its labor." A Cause must be a Substance, or being in energy; but a Substance is not necessarily, or always, an *active* Cause; and, in fact, is never so except so far as it is, at least for the time, endowed with power, or has power as one of its attributes. Descartes confounded the two altogether, or at most, misled in spite of himself by the Scholastic philosophy, he introduced only the conception of *immanent* cause, which, properly speaking, is no cause at all. In a certain sense, a Substance is the Cause of its attributes, inasmuch as it is a condition or prerequisite of the manifestation of those attributes. But as such, it is a dead, or inbiding (indwelling, *immanent*,) Cause, operating only on itself, and not a living and conscious energy going forth beyond its seat (*transeunt*), and so operating on other things *ab extra*. Thus, iron is an *immanent* cause of its own hardness and malleability, whilst mind or self is a *transeunt* cause, going out beyond itself in volitions, and subduing matter to its own will. Substance and attribute are as indissolubly united as matter and form, since the one cannot even be conceived without the other; but the only Cause which we directly *know*, the human will, is often dormant, and only rouses itself into activity when it sees occasion.

Observe also how Descartes expresses himself on this subject, for in these expressions are found the germs which Spinoza soon expanded into a demonstrated system of Pantheism. We conceive

Substance, he says, as existing *per se ; i. e.*, which has need of nothing else than itself in order to exist. Strictly speaking, therefore, God only is such a substance; for there is no created thing, he maintains, which can exist a moment without being upheld and preserved by his power. Hence he asserts that creation is not a single act, but a continuous exertion of divine agency, without which everything would instantly lapse into the nothingness whence it was drawn. Then the name Substance can be applied only in a secondary and derivative sense to any *created* thing whatever; we mean, he says, that it has no need of anything else than the ordinary Divine assistance in order to continue in being.

Evidently here is a confusion of the relation between Substance and Attribute with that between Cause and Effect. In the former, we say that the Attribute exists only in and through the Substance in which it inheres, and is thus absolutely dependent upon it; while the Substance, though it is manifested *to us* only through its phenomena, *i. e.*, its Attributes, is yet, as their substratum, really independent of any one of them, and would continue to be though it were not. At any rate, the relation between them is continuous and perpetual, not implying either change, activity, or power. In the latter, the effect begins to exist, as it is only *change*, an event, which requires a cause; and even then the effect does not exist only in and through the cause, but is produced by it; when, being once created, it continues to be without further exertion of power, until a subsequent change requires another cause. To assume that the relation of creatures to a Creator is the same as that of Attributes to a Substance, is to negative any change whatsoever, and thereby to lead inevitably to Pantheism; but it is a wholly unfounded assumption.

Yet this doctrine of continuous creation occupies a very conspicuous place in the Cartesian system of metaphysics. The chief argument which is urged in its favor is founded upon the mutual independence of all the parts, infinite in number, which constitute a given portion of time. As no one moment has any connection whatever with the one which immediately precedes or follows it, beyond the fact of mere succession, — as one comes after the other without being in any way tied or fastened to that other, — so it by no means follows, from the fact that I exist at the present moment, that I must continue to exist the moment afterwards. If I had this power of continuing myself in existence, I should know it, I should think it, for I am a being that thinks. But I do not know it, I do not think it; then I do not possess it, and I am constantly

dependent upon some being distinct from myself. My preservation, then, is but a continual repetition of the act which created me; and the fact of my duration, just as much as the fact of my existence, proves the being of a God. He even avails himself, for the purposes of this argument, of the old Scholastic distinction between a cause *secundum fieri* and a cause *secundum esse*. In the case of the former, which is such a cause as an architect is of a house, or a printer of a book, there is no proper creation, but only a new arrangement of preëxisting materials; therefore the effect endures after the cause *secundum fieri* has ceased to operate. But a cause *secundum esse* really creates, and if it did not continue in action, the effect would instantly disappear. Such is the relation of the sun to light, and such the relation of God to the universe. If the sun were struck out of the heavens, all would immediately become dark.

Although every attribute, continues Descartes, is sufficient to manifest or make known the substance in which it inheres, still there is one attribute in each which constitutes the nature and *essence* of its substance, and on which all the other attributes depend. Thus, extension constitutes the essence of every corporeal, as thought forms the essence of every thinking thing; since every other attribute of body presupposes extension and is dependent upon it; and in like manner memory, imagination, perception, affirmation, and denial are only different modes of thought. There is no color except of an extended surface, no shape or figure except of that which has length and breadth, no movement except of an extended thing in an extended space. Thus, also, sentiment, feeling, and will exist only in a being who thinks, and cannot even be conceived except through thought.

Here the bias of the mathematician shows itself. To the geometer, every property of a circle or a triangle is a necessary consequence of that one genetic property or attribute which forms the definition of a circle or triangle, and can be deduced from it by strict demonstrative reasoning. In like manner, we may *believe* that, among all the attributes of any particular substance, there is some one which is primitive, essential, and genetic of all the rest. But there is no proof that there is any one thus genetic of the others; and if there were, only omnipotence could know which it is. Extension, it is true, is necessary to body, which cannot even be conceived to exist without it; but so also is impenetrability. And neither of these is genetic of the other, nor of any of the remaining attributes of matter. In like manner, thought is neces-

sary to mind, for that would not be mind which is not capable of thought. But thought is not genetic of perception, feeling, or will, neither of which can be deduced from it *a priori* or by demonstrative reasoning. Locke properly distinguishes between the Real and the Nominal Essences of things. The former, he says, is the real internal constitution of things, on which all their discoverable qualities depend. "This is the proper original signification of the word, *essentia*, in its primary notation, signifying, properly, *being*." In substances it is unknown, being evidently beyond the reach of the human faculties, which can take cognizance only of the phenomena of things. The *Nominal* Essence depends not on the real constitution of things, since this is undiscoverable, but on the artificial constitution of genera and species, *i. e.*, on the arbitrary classification of things which we make for our own convenience, and to this the name is attached. A change of the Real Essence would change all the attributes or properties of the thing, as these depend upon it. But a change of the Nominal Essence would alter only our classification of them; it would be only changing the significance of names. But while this is so in respect to substances or real things, the case is different with simple ideas and modes, — the figures in geometry, for instance, or the numbers in arithmetic; — for in respect to these, the Real and the Nominal Essences coincide. Locke's whole discussion of this subject, contained in his chapter on General Terms, is admirable. It was the best explication for the time of the questions lying at the root of the old dispute between Nominalism and Realism, a controversy which has occupied the schools ever since the birthtime of philosophy.

Against those opponents of his system who maintained that we have no *clear* idea of the Infinite, and that the being of a God cannot safely be inferred from the vague and confused notion which we have of it, Descartes stoutly argued: "On the contrary, the idea of the Infinite is very clear and very distinct, since all that my mind clearly and distinctly conceives as real and true, or as having any perfection, is wholly wrapped up and contained in this idea." He denies also that it is only a negative idea made up by a negation of the finite, just as rest and darkness are only the negation of motion and light. "On the contrary, I plainly see that there is *more* reality in an infinite substance than in a finite one, since to conceive the latter, we must take away something from our idea of the former, and so far limit and restrict it. Hence, in some way, my mind must conceive the Infinite before it can have any notion of the finite."

Having finished this brief review of the leading doctrines in the philosophy of Descartes, in which I have selected those which have had most influence on the subsequent course of speculation, let us go back for a moment to the initial stage of his system.

"I think, therefore I am," says Descartes. But it was soon objected that this is a begging of the question; for the conclusion here is not an inference from the premise, but is contained, being already assumed, in that premise. *Cogito* is equivalent to *ego sum cogitans*. Very true, answered Descartes; that is precisely what I mean. Instead of *ergo*, substitute *scilicet*, or in French, *c'est à dire;* I think, *that is to say*, I am. Because the existence of the thought involves and carries along with it the existence of the thinking being, you cannot dispute the reality of the latter without also denying the consciousness of thought itself, and thereby denying your own denial; since that denial itself is thought. My original statement was not argumentative, but explicative. Personal existence, the reality of the Ego, is not a truth of inference, or a fact resting upon circumstantial evidence; it is an immediate intuition, — a fact of internal experience, — a primary datum of consciousness. This is Locke's own doctrine, though it is the last that would be expected of him according to the common notion that his system traces the origin of all our knowledge to sensation. It may even be doubted whether the relation of the thinker to the thought is properly expressed as that of a substance to its attributes; it is rather that of an agent to his actions; so that to assert the reality of the *thought*, and deny that of the *thinker*, is as absurd as to affirm *motion*, and yet deny that anything is moved. Or to take an illustration from geometry, parallelism is impossible, if there are not two lines or surfaces to be parallel. Just so, *conscious* thought — that is, *known* thought — is impossible except somebody knows it. And this is what Descartes means; *cogito, ergo sum*, is not an enthymeme, or imperfect syllogism, as many have imagined; it is the statement of a fact, an intuition expressed in language.

I dwell upon this point, because it is the fashion nowadays, under the doctrine of the Relativity of Knowledge, to affirm that an ontology, or doctrine of *real* being, is impossible, all our knowledge being limited to phenomena, or *apparent* being. And the history of all the attempts that have been made for the last three thousand years demonstrates at least as much as this, that the possibility of ontological science depends on the doctrine of intuitive knowledge of the Ego as real and causative existence, and

not merely as a substance inferred from the presence of its attributes.

Descartes is also entitled to credit for being the first to point out with great clearness the radical difference between the Ego, or self, and corporeal substance, that is, between mind and matter. Body, of its own nature, he argues, is always divisible; while mind is entirely indivisible. For when I consider myself merely as a being that thinks, I cannot find in myself any distinction of parts; for I know and conceive myself very clearly as an existence which is absolutely one and entire. And although my whole mind seems to be united to my whole body, — being all in every part of it, — yet when a foot, an arm, or any other part has been cut off from my body, I know very well that nothing has thereby been taken away from my mind, or proper self, since it remains entire. Neither can the faculties of will, feeling, conception, and the like, properly be called parts or portions of my mind; for it is the whole mind or self which wills, the whole mind which feels, conceives, etc. These are not so much distinct faculties, as different modes of operation of one and the same power or active substance. Now it is just the contrary with corporeal and extended things; for I cannot imagine any one of these, however small it may be, which I cannot easily, through my thought, if not in reality, separate into many parts, so that I know it to be divisible. And this is enough to prove to me that the mind or soul of man is essentially different from material substance.

It appears, moreover, that thought is not in any wise dependent upon body; for the thought continues to exist after I have already supposed the annihilation or non-existence of body. It is evident, also, that we have even a clearer conception of what mind is, than of what body is; for the two have not a single attribute in common, every property of body presupposing extension, while every function and act of mind presupposes thought, which we cannot even imagine to be extended. Now I clearly conceive what these mental acts and functions are, and that they are independent of extension, which enters into or constitutes every attribute of body. In vain does one excite his imagination in order to see if he is not something more, or something other, than thought. "Nothing of what the imagination gives us," he says, "belongs to that knowledge which we have of ourselves; and in order to know its own nature, the mind must wholly give up the exercise of imagination." "I am not that assemblage of limbs which is called the human body; I am not a subtile and penetrating air diffused through all

these limbs; I am not a wind, a breath, a vapor, or anything which I can imagine; for I have already supposed all these things to cease to exist; yet in spite of that supposition, I do not find that I cease to exist as a thinking being."

So far, Descartes is unquestionably right, and his doctrine rests upon as firm a basis as the first truths of geometry. But he allowed the discussion to carry him too far, when he so far identifies the action with the agent, or the attribute with the substance, as to affirm that the very essence of the Ego consists in thought, so that to cease to think would be to cease to exist. In point of fact, I believe with him, that the soul always *does* think; but this is not maintaining that it always *must* think, else it would no longer be. *This* is the Cartesian doctrine, which to many seems paradoxical, and was stoutly denied by Locke; that even in profound sleep, in a fainting fit or swoon, the soul *cannot* intermit its activity, which is its life. The thought may be unconscious, or may be forgotten the moment afterwards; but the actual cessation of thought, though but for one moment, would be, according to Descartes, not merely death, but annihilation. Awakening would be the creation of a new life, not the restoration of the old one.

A more important consequence of this identification of personal existence with thought is, that we thereby attribute to the former the changeableness, the plurality, the perpetual flux, which characterize the latter. If my thought *is* myself, then I am not the same self at any two successive moments; and thus another cardinal doctrine of the Cartesian system falls to the ground.

Cartesianism was first published to the world in the author's "Discourse upon Method," printed in 1637. In this work, however, the system is very briefly and imperfectly sketched out, much space being given to some autobiographical details, in which he describes the experiences of his earlier life, and the processes of thought which led to the formation of his opinions, and which he proposes as general rules for the search after truth. In 1644 he published his "Principles of Philosophy," in four books, the first of which sets forth a complete and well digested summary of his metaphysical system, the other three being devoted to physics. This arrangement results from his doctrine that Philosophy is the whole of science, and may be conceived as a tree, of which metaphysics are the roots, while physics are the trunk, and the other sciences are the branches. The first book of these Principles may be recommended to those who seek for a succinct, and at the same time, full and orderly exposition of his system. In 1641, ap-

peared his "Metaphysical Meditations," in which his philosophy is further worked out and elaborated, with some modifications of those points which were most liable to objection. This was his favorite work; he had submitted it in manuscript to the most eminent thinkers and learned men in Europe for their criticism; and a summary of their objections, with his answers to them, was appended to the later editions. This step was an additional means of securing for his philosophy the notice, consideration, and influence which it soon acquired throughout Europe. In purely speculative science, it was far the most important work of the age; it shaped and modified the whole course of European thought for more than a century. Among the correspondents to whom it was submitted, and whose objections, with the replies to them, were subsequently published, were Cater, Mersenne, Arnauld, Gassendi, and Hobbes. The correspondence was conducted in good taste and temper, and with great ability, the whole forming one of the most interesting discussions of purely metaphysical subjects that have appeared in modern times.

CHAPTER III.

Innate Ideas. — The Idea of God in the Mind of Man.

In considering the philosophy of Descartes, two important subjects came into view which deserve a more thorough examination than it was possible to give them in the last chapter; I mean the questions respecting innate knowledge, and the idea of God in the human soul. Under the authority of Locke, who, in his "Essay on Human Understanding," argued stoutly against Cartesianism, the theory of the empiricists in respect to both of these subjects has always been the predominant one on English ground, while the opposite doctrine has prevailed both in France and Germany, under the influence of Descartes and Leibnitz.

The question respecting the *origin* of knowledge is one that has been discussed during every period in the history of abstract science. Even at the present day, in all countries where philosophy has any disciples, it is still debated with as fresh an interest, and as keen a use of all the weapons of dialectics, as when it was first mooted in the schools of Greece nearly three thousand years ago. The question is one of permanent and engrossing interest, because on the answer to it depend the opinions that we may entertain on subjects of the gravest moment, not only in psychology and metaphysics, but in theology and physical science. What are the natural and original characteristics of the human mind at the moment of its creation, before it began to be modified and informed by experience? Was it a mere *tabula rasa* — a blank sheet of white paper — a clean slate, on which any characters whatever might be impressed by future events, having no inborn aptitude or predisposition for any one impression rather than for any other? Or had this blank been already touched by a Divine hand, — written all over, in fact, with the hieroglyphics of eternal and necessary truths, — invisible indeed at first, but invariably brought out into clear vision through subsequent experience, though such experience could no more have first impressed these characters, than the vapor-bath of iodine could originally have traced the sun-picture which it

first reveals? Have we any Innate Ideas, or are the limits of our external senses also the boundaries of our knowledge, so that every expression in our vocabulary which cannot find an external and sensible object, to which it can thus establish its affinity, is destitute of any real significance? Tell me your answer to these questions, and I will tell you the leading features of your whole creed in science, philosophy, and religion.

Plato believed in the preëxistence of the soul, and hence that most of the glimpses of the higher truths of science and philosophy, which we obtain in this our mortal life, are but vague and shadowy recollections of the eternal verities of which we had immediate vision in the distant realms of spirit that we have left. Our mode of *apprehending* ideas and general truths, according to him, is neither more nor less than the *recollecting* of those things which the soul formerly saw when it sojourned with the gods, and, disregarding what we now call phenomenal or apparent things, applied itself to the apprehension of pure being — τὸ ὄντως ὄν. But I need not spend words on the explanation of a theory which Wordsworth has expounded with so much splendor of diction and imagery in his immortal ode.

"Our birth is but a sleep and a forgetting: —
The soul that rises with us, our life's star,
Hath had elsewhere its setting,
And cometh from afar.
Not in entire forgetfulness,
And not in utter nakedness,
But trailing clouds of glory do we come
From God who is our home.

. . . . .

Yet not for these I raise
The song of thanks and praise;
But for those obstinate questionings
Of sense and outward things,
Fallings from us, vanishings;
Blank misgivings of a creature
Moving about in worlds not realized;
High instincts, before which our mortal nature
Did tremble like a guilty thing surprised:
But for those first affections,
Those shadowy recollections,
Which, be they what they may,
Are yet the fountain light of all our day,
Are yet a master light of all our seeing;

. . . . . .
. . truths that wake
To perish never,
Which neither listlessness nor mad endeavor
Can utterly abolish or destroy."

That very learned and devout theologians consider this doctrine

to be perfectly consistent with the teachings of Christianity, is proved by the following quotation from the "Lectures on Poetry," delivered at the University of Oxford by the amiable and pious Dr. Keble, the associate and friend of Dr. Pusey and Dr. Newman, and, like them, one of the leaders of the Tractarian party in the English church. After the fashion at Oxford in the early part of this century, his lectures were delivered and published in Latin, so that I must cite only my own bald and feeble version of them into English.

"Strange if we should not sometimes be tempted to believe the doctrine of Pythagoras, who held that our souls did not then *first* begin to be when we were born into this world, but rather that, coming from some unknown distant region, they then first assumed each a body of its own; nor had they been so steeped in the waters of Lethe, but that there still lingered in them, as it were, some tang and relish of their former state, by what sense now perceived I know not, but yet somehow at happy moments really cognized. And thus are the memories of childhood flavored with their well known exquisite delight only because of some faint sense yet abiding in them of man's earlier abode nearer to God."

Aristotle, the personification of cold, abstract thought, rejected the whole of Plato's mystic doctrine of Ideas, argued stoutly against it, and established positive science on the basis of empiricism. In one of his treatises, we find a precise statement of that doctrine which has since been so pithily expressed in the famous Latin adage, *nihil est in intellectu quod non fuit prius in sensu.* The Schoolmen were divided on the subject, the more mystical and devout among them following Plato's guidance, especially in maintaining the innateness of the idea of God to the soul of man, while their more subtle analysts and logicians adopted the doctrine of Aristotle, that all our knowledge has its origin in experience.

If the doctrine of Innate Ideas appears to border too closely upon the realms of mysticism and fanciful speculation, to be allied rather to the poetical dreams of a Plato or a Wordsworth than to the patient investigations of an earnest seeker after truth, we have only to remember that Descartes and Leibnitz were far the greatest mathematicians of their times, — among the greatest, indeed, of all time; the discovery of analytic geometry by the former being surpassed in importance and brilliancy only by the invention of the differential and integral calculus, which was made simultaneously by Newton and Leibnitz. Thus proficient in the most rigorous of all sciences, they were the last persons in the

world to amuse themselves with building up metaphysical fancies in the clouds.

In further elucidation of the leading doctrine, the innateness of the idea of God to the soul of man, let me present the same dogma as set forth and defended by one of the ablest thinkers and most eloquent writers of our own day,—I mean Cardinal Manning, formerly of the English, now of the Romish church.

"The first relation of reason to revelation," he observes, "is to receive it by intellectual apprehension. It is like the relation of the eye to sight. There are, I may say, two kinds of sight, the passive and the active; that is, in plain words, there is a difference between seeing and looking. In the former, the will is quiescent; in the latter, it is in activity. We see a thousand things, when we look at only one; we see the light, even when we do not fix the eye upon any particular object by an act of the will." This difference, I may further remark, between sensation alone, and sensation accompanied by the attention that is induced by effort and directed by will, can be expressed better in French, where there are different words to express these separate acts. "*Partout*," says Laromiguière, "*on voit, et l'on regarde; on entend, et l'on écoute; on sent, et l'on flaire; on goûte, et l'on savoure.*" "So the intellect is both active and passive. And the intellect must first be in some degree passively replenished or illuminated by an object, before it can actively apply itself to it."

Perhaps the most striking instance of *seeing* more than we *look at*, or *attend to*, is afforded by every person's experience on first opening a book. Undoubtedly we *see* at once the whole page, if it be not a very large one, the entire image of it being impressed at once on the retina of the eye; and so distinctly also, that we can often tell by a single glance, or in one or two seconds of time, whether the particular word or sentence, which we are in search of, is contained on that page or not. But in order fairly to read that page, and to take in or comprehend the full sense of what it contains, especially if it be abstruse and novel matter, two or three minutes are necessary; for we must successively *look at*, and attend to, not only every word, but every letter, on that page; and the only wonder is, how we can do this so quickly.

Just so may we consider that Inhate Ideas are actually present to the mind. They are really *there*, and so to speak, truly *visible* to the inner sense. But unless some experience, suggestion, or instruction calls our attention to them, we do not *look at* them, and consequently they are to us as if they were not.

"Though the existence of God may be proved by reason and from lights of the natural order, it is certain that the knowledge of God's existence anticipated all such reasoning. The theism of the world was not a discovery. Mankind possessed it by primeval revelation, were penetrated and pervaded by it, before any one doubted of it; and reasoning did not precede, but followed the doubt. Theists came before philosophers, and Theism before Atheism, or even a doubt about the existence of God. St. Paul says, 'the invisible things of him from the creation of the world are clearly *seen*, being understood by the things that are made, even his eternal power and Godhead; so that they are without excuse.'"

This passage, as it seems to me, throws light on the manner in which *a priori* knowledge, or Innate Ideas, exist in the mind, before they are developed by experience or distinctly recognized and explicated by conscious exertion of the intellect. Certainly we have reason to believe that the ideas of a Divinity, of space, of time, of efficient causation, of substance, of right and wrong, and some others, are truly *a priori*, or in some way, innate; that is, if not absolutely born with us, they are native to the mind, being inwrought into its inmost structure, and necessary in order to form the very experience which appears to develop them: so that, when first distinctly taught to us by others, they are not merely *cognized* as new, but *recognized* as old and familiar truths, portions of the very framework of our mental being. You have not learned from a book, nobody ever taught you, or can teach you, what time and space are; or that they are indestructible; that they exist without break or interval, in absolute and indivisible continuity, an unseamed garment without possible rent or division; and that they are infinite in the strictest sense of this term. Neither were they received from the senses, for they are altogether imperceptible to sense. Yet no one is ignorant of these ideas or truths, or doubts their reality, or needs to be convinced that it is reasonable to believe in them. No metaphysician can teach you one jot more about them than what you know already, — than what you have always known. He can only induce you to look at them steadily and inquiringly, instead of being content merely with passively seeing them. He can help you to bring them out into clearer consciousness, and to state in a fuller and more definite manner the conclusions respecting them which your own minds instinctively and necessarily suggest, and which admit of no more doubt or question than the axioms of geometry or the truths of the multiplication table.

To Leibnitz belongs the credit of being the first to point out and establish these two criteria, or tests and proofs, of Innate Ideas, to wit, universality and necessity. Whatever is universally true, true not merely so far as my experience, or as the experience of the whole human race, has gone, but true everywhere and at all times, true under all circumstances and conditions, and without any exceptions or limitations whatsoever, — that is an innate truth, or one which had its origin in the soul itself, and was not impressed upon us through the senses, or from the world without. Again, whatever is necessarily and absolutely true, — that is, so true that neither you nor I can even *imagine* it to be false under any circumstances whatever, — that also is innate, or had its origin in the very constitution of the mind. Now these two criteria are found always to go together, each involving the other, so that, in fact, they coincide and form but a single test. Whatever cognition is necessary must, for that very reason, be universal; and, in like manner, it could not be absolutely universal, if it were not also necessary. And the number of truths is not small which possess these two decisive characteristics; whole sciences are made up of them alone. All the truths of pure Logic, pure Mathematics, and pure Metaphysics are of this character. For instances, take from Logic what is called the law of Excluded Middle, — either A is B, or A is not B; — of these two contradictory propositions one *must* be true, the other *must* be false, and no third judgment, no compromise or half-way truth between them, is conceivable or possible. From Mathematics, take the geometrical theorem, that a tangent to a circle must be perpendicular to the radius drawn to the point of contact. From Metaphysics, take these truths, that space is indestructible, even in thought; and that it is necessarily continuous, its parts being inseparable from each other, and also immovable. Are not these assertions, and all others like them, both universally and necessarily true? Can you even imagine the contradictory of them to be true? Do they not conform to the proper definition of knowledge, that we are irresistibly convinced of their truth on perfectly satisfactory evidence, so that we do not merely *believe*, but we *know*, that they are true? Would any experience, any number of experiments, any actual measurements, for instance, of the angle between a tangent and its radius, showing it in each case to be equal to a right angle, give you the unhesitating conviction of their truth which you now possess? Contrast them with a fact of experience resting on the largest possible amount of merely empirical evidence. It is a fact confirmed by the daily united experience of

the whole human race ever since the creation of animal life, that, everywhere within the tropics and the two temperate zones of this globe, daylight and darkness have always succeeded each other within every twenty-four hours. And yet no one has the slightest difficulty in conceiving or imagining that the sun should not rise to-morrow — that the miracle attributed to Joshua should be repeated — that daylight should last continuously more than one day. If not, then there is a broad and impassable distinction between empirical and contingent truths on the one hand, and necessary cognitions *a priori* on the other.

And yet it is a fact that most of these necessary and universal truths, whether in logic, metaphysics, or mathematics, were probably first learned by you when you first studied these sciences, perhaps after you were twenty years old. But what of that? *When* you learned them, did you accept them as true merely because the book, or your teacher, said so, or did the instruction so received merely direct your attention towards, and bring out into distinct consciousness, what was already *implicitly* in your mind, and what was then first recognized or known over again, as resting on its own evidence, shining by its own light, far down in the inmost recesses of your intellect? I admit that the human mind may be fairly considered as a dark chamber, into which the light of experience must be introduced before we can read what is already written on its walls, and which, *once read*, are —

> "truths that wake,
> To perish never,
> Which neither listlessness nor mad endeavor
> Can utterly abolish or destroy."

All I maintain is, that the illuminating rays did not write the inscription, but only enabled us to find it there and read it. The *innateness* of a truth does not refer to the *time*, but to the *place*, of its origin. The question is not whether it was already with us in our callow infancy, but whether it had its source within or without, — whether it is native to the soul, spontaneous and inwrought in its inmost being, or adventitious and foreign, a communication from the senses. To recur to Cardinal Manning's distinction, though the book or the teacher first taught us where to *look* for it, yet when once perceived we immediately recognize and accept it, and know that it has been within our reach, that we have in a certain sense been *seeing* it all our lives. If you will accept a semi-ludicrous illustration, we do not cut our wisdom teeth till about eighteen years of age; and yet they do not come to us from without by any

human art of dentistry, but they were preformed in the original constitution of our bodies, and long afterwards first brought out to use and sight when needed.

The more we think of it, the more that doctrine of Leibnitz, which appears so wild and fanciful at first, that every Monad has in it from its first creation an infinite number of confused unconscious perceptions; and that these, in the successive stages of its being, are slowly evolved from each other in regular order, and so rise into consciousness, not through any contact or impulse from things without, though such contact or impulse furnishes the *occasion* on which they rise, but only through the Monad's, or soul's, own internal law of development, — the more, I say, this doctrine appears plausible and credible. Of course, these perceptions appear novel or first created when we first become conscious of them; but on this theory, like the wisdom teeth, they preëxisted in us from the beginning, though dim and unconscious, "shadowy recollections,"

> "Fallings from us, vanishings,
> Blank misgivings of a creature
> Moving about in worlds not realized."

Many persons are not infrequently troubled, on first reading some interesting passage in a book, first learning some truth, or striking into some novel vein of thought, with an indistinct consciousness that it is not entirely novel, — that they have somewhere read or thought the same thing before. I think, also, we must be struck with some analogy between the proper mental action of human beings and the instincts of brutes. Why should all the knowledge or skill — call it what you please — of the bird, the bee, or the spider be unquestionably innate, or prior to experience, since it is manifested before the creature is a day, or even an hour, old, while man is compelled to learn every lesson from the slow and imperfect teachings of experience? The Baltimore oriole weaves its curious "pendent nest and procreant cradle;" the bee constructs its marvellous geometric cell; the spider invents, and spins from its own bowels, its ingenious trap for flies, — all without any instruction, with no guiding pattern or example, before any possible opportunity for observation or experiment, *and they make no mistakes.* Why, then, should it be thought incredible, that the human mind learns its lessons so easily and so well only because they are really now learned not for the first time, because they were dimly set forth, faintly inscribed on the tablets of memory, when that mind was first constituted; and thus, that what we call *learning* is in fact *reminiscence?*

In further illustration of this doctrine, I borrow, from his criticism of Locke's theory of knowledge, Cousin's lucid distinction between the logical and the chronological order of our ideas. In the order of time, indeed, the child learns what *body* is before he comes to know extension or space; and he also has experience of *succession*, that is, of one thought coming after another, before he forms the abstract idea of *time*. But in the logical order, this precedence is reversed; that which is the logical condition or prerequisite must precede that of which it is the condition, just as we must *conceive* the cause to be antecedent to the effect, though, practically, the two are simultaneous. Extension is an essential attribute of body; and thus I could not know body to be body, if the idea of space were not already in my mind, if it did not exist there *a priori*. In like manner, *time* is a logical condition or prerequisite of succession, since there cannot be succession if there be not *time* in which this succession may take place. Logically, then, the idea of time must precede the conception of *before* and *after*, which is the essence of succession.

Leibnitz himself remarks: "I do not maintain that Innate Ideas are inscribed in the mind in such wise that one can read them there, as it were, *ad aperturam libri* — on first opening the book — just as the edict of the prætor could be read upon his *album*, without pains and without research; but only that one can discover them there by dint of attention, occasions for which are furnished by the senses." Making experiments in individual cases serves to confirm these primitive truths of the intellect, just as we prove a sum in arithmetic, the better to avoid error when the calculation is long. "I have compared the mind," he adds, "rather to a block of marble which has veins marked out in it, than to a block which is homogeneous and pure throughout, corresponding to the *tabula rasa* of Locke and his followers. In the latter case, the truths would be in us only as a statue of Hercules is in any block which is large enough to contain it, the marble being indifferent to receive this shape or any other. But if there were veins in the stone, which gave the outline of this statue rather than of any other figure, then it might be said that Hercules was in some sense innate in the marble, though the chisel were necessary to find him there by cutting off the superfluities." Often, as in attempts to remember what has been partially forgotten, we know that truths and ideas are actually present in the mind, though they cannot be discovered and brought into distinct consciousness except by attention and repeated effort. "Hence, to the well known adage of Aristotle, *nihil est in*

intellectu quod non fuit prius in sensu, I have added this qualification, — *nisi intellectus ipse.*"

Closely allied with this subject, and bearing upon it as argument, is the doctrine of Leibnitz respecting the Primum Cognitum, or the origin both of ideas and names; whether they come first from, and are first applied to, individual things and particular objects, or whether they originate with general terms, universals, and whole classes of things. The theory of the empiricists, of those who hold that all our knowledge begins with information derived from the senses, is, that we first know, and first give names to, particular things, — this or that one tree, house, or river, with which we first become acquainted, — the name thus given being a proper noun. Afterwards, when we come to know other objects of the same class, we transfer the same appellation to them also, on account of their similarity; and thus the proper noun becomes a common one, the name of many. Thus the young child first calls one person *nurse* or *mamma;* then it transfers these names to several persons, calling them each *nurse* or *mamma;* and finally, as its experience extends, it acquires the generic idea, and employs the generic term, *woman.*

Not so, says Leibnitz; we begin with generals, with names of classes, because these connote only few attributes, and so are quickly and easily learned; afterwards, as knowledge increases, we come to know more and more attributes, whereby to distinguish from each other successively smaller and smaller classes; and finally, we learn enough to distinguish even individuals, and give each of them a proper name. Thus, you or I, with little knowledge of flocks and herds, have but one name for a multitude, say *sheep* or *cattle.* Their owner, knowing them longer and better, readily distinguishes and names his Merinoes and Saxonies, his Alderneys, Durhams, and shorthorns. And the herdsman, who has tended them every day for a year or more, easily recognizes and has a pet name for every head in the flock. Every object that the young child sees is *thing — something;* next it knows *hard things* and *soft things;* next, *wood, iron,* and *stone;* next, *tables, chairs, clocks;* and last of all, *papa's own armchair.* "Naming begin with individuals!" Why, among the infinity of objects that surround us, we have not yet invented a proper name for one out of a million. Who ever thought of naming any one blade of grass, leaf from a bush, or tree in a forest? Most, if not all, of our proper names, were originally general terms; thus, Smith, Carpenter, Mason, Stone, Wood, Green, Brown, etc.

Now observe that classes and class-names exist only in the mind; they are products of thought, or at most, results of generalization; while all existing material objects, each and every thing of which the senses take cognizance, is an individual, — a particular thing. Then knowledge and language both originate from the mind, not from the senses. Plato's doctrine of abstract Ideas no longer appears fanciful or mystical. The objects of the senses, the phenomena of the visible and tangible world, give only individual knowledge, which does not deserve the name of *science.* But fleeting and imperfect as these are, they afford indications, they are shadows, of the Intelligible world which lies beyond, and which contains the general Ideas, the archetypes, that are the truth of things. The transitory phenomena are not *true* existences, but they are images of true existences. Our object is to interrogate them, to classify them, to disentangle what is invariable and necessary from the variable and contingent; to discover the One in the Many. The object of philosophy is to reduce the multitude to unity. Philosophy, which is deductive, has nothing to do with individuals; it is occupied solely with classes. It seeks to cognize directly the good, the beautiful, and the true, in their eternal archetypes, as these exist in the mind of God, and not merely individual instances, imperfect and transitory because individual, of goodness, beauty, and truth. The mind of man, instructed by philosophy, is fitted to discourse immediately with these Ideas, which are the patterns of all created things, if it can only be freed from the dominion of the senses.

The next subject which I propose to discuss — the Idea of God in the Soul of Man — belongs at least as much to philosophy as to theology. Every student of philosophy knows that the systems of Descartes, Spinoza, and Malebranche are based upon this Idea as their point of departure, and are colored throughout by the interpretation given to it; and nearly as much may be said of Leibnitz and the later German metaphysicians, as well as of the most eminent speculatists of our own day; though they often veil His ineffable being and essence under the names of "the Absolute," "the Universal Will," "the Unconscious," and "the Unknowable." All alike bear testimony to the fact that this Idea, in some one of its forms, is primitive in the mind, and upon our conception of it must depend any theory which we may form concerning the nature of pure being, the origin of existence, the source and certainty of knowledge, and the relations of man to the universe. Let us endeavor, then, to bring together and compare with each other the

various interpretations which have been given to it, and the manner in which philosophy and theology will be affected by adopting either one of them to the exclusion of the others.

There are, I think, three leading forms of this Idea, with which all who have given much thought to the subject are already more or less conversant, and to which all the less prominent varieties of it may easily be reduced. Let me enumerate these briefly at the outset, in order to prepare the way for a subsequent fuller consideration of them.

First, there is the primitive idea of God, which is innate in the human mind, which lies far down and indistinct in the depths of man's primitive consciousness, which we all at first see, though without looking at it, and which, as such, is "the true light which lighteth every man that cometh into the world." Of course, this is the germ of all the theories which may subsequently be formed upon the subject. Like our other Innate Ideas, — like those of space and time, for instance, — it may, sooner or later, more or less, or even not at all, be developed by reflection, instruction, or revelation, though these all presuppose it, virtually appeal to it, never entirely efface its original characteristics, and could no more have first imparted it to man than they could have taught geometry to a brute.

Secondly, this germ is often developed, as we have too often seen, by reflection and *deductive* reasoning, into what may be called the metaphysician's or philosopher's idea of God, as the Infinite and the Absolute, First Cause and *Causa sui*, — as such, necessarily existent, eternal, immutable, and impassive; creating, indeed, because his very being is *actus purus* (action without passion), and therefore necessarily evolving creation from his own essence, though without designing it, as he is without purpose, without affection, and even without consciousness, or any distinctive attribute of personality.

Thirdly and lastly, experience and *inductive* reasoning — especially experience of sorrow, weakness, and sin — have evolved from this innate germ what I am content to call the child's idea of God, for it is also the traditional and the Christian conception of Him, as an all-wise and all-gracious Providence and Moral Governor of the universe, who hears and answers prayer, who rewards justice and punishes iniquity, is offended by sin and propitiated by worship and obedience, and who makes known his will to man by direct and special revelation and by working miracles, as well as by the inward teachings of his Spirit, and by the numberless mani-

festations of artistic and specific design in the visible universe, — a Father in heaven, with a personality as distinct and as conscious as that which he has imparted to you and me, and to all our human brethren.

Now, it is obvious that each of these three forms of the Idea, if taken entirely by itself, to the exclusion of both the others, is an inadequate and unworthy conception of Him whom it partially represents; and is even illusory and deceptive, as leading, either by plain implication or inevitable inference, to consequences which the heart, at least, if not the reason, instinctively rejects. And yet, as I believe may be easily shown, each of them contains some phase or aspect of the truth which is wanting in both the others; and hence, both reason and revelation imperatively require that all three of these representations be combined, before we can attain any full and worthy conception of the Infinite and Holy One whom we all seek to know and to adore. But no sooner do we attempt such combination than we are beset with difficulties. Many of the attributes which we strive to grasp together appear, on closer examination, to be inconceivable to thought and irreconcilable with each other. The conclusions to which we are led seem at variance with established facts, or with our most cherished convictions and hopes, or with those necessary laws of thought on which all our reasonings and investigations in other cases depend. We find ourselves either groping in the dark, or blinded by excess of light; and in either case, we are compelled to echo the sublime exclamation of the Hebrew seer: "Canst thou by searching find out God? Canst thou find out the Almighty unto perfection? It is high as heaven; what canst thou do? Deeper than hell; what canst thou know?"

But here, philosophy and revelation alike come to our aid, and assure us that these perplexities and contradictions result from the finiteness of our capacities and the necessary limitations of the human intellect. These difficulties are not inherent in this one object of thought, or peculiar to a single line of inquiry. They meet and repel us on every hand, whenever we attempt to transcend the sphere of the limited and the finite, to grasp the immeasurable, to descend to the atom, or mount to the absolute beginning of things — to know anything whatever as it really is, or in its inmost essence. Granted, that we cannot fully comprehend God as He really is; so neither, if our knowledge be weighed in the same balance, can we understand ourselves. Space and time and causation, pure being and personal being, man and God, must be accepted as ultimate and inexplicable facts. We do not merely

believe, we know, that they are, but cannot tell *how* they are. As we cannot go back in an infinite regress, forever deducing one proposition or idea from a preceding one, all that is comprehensible and provable must rest, in the last analysis, on that which is incomprehensible and unprovable. We thus learn, to adopt the language of Sir William Hamilton, that the capacities of our thought are not to be erected into the measure of existence, and that no difficulty emerges in theology which had not previously emerged in philosophy. The first principles of mathematical and physical science are as inconceivable and inscrutable as the first principles of theology.

The first or innate form of the idea of God is crude, indistinct, and wavering. If taken by itself, to the exclusion of both the other forms, and without the aid of revelation, it is as likely to become the basis of gross superstition, to be developed into fetichism or polytheism, as to lead to pure monotheism. The second or metaphysical conception of God, as we may learn from Spinoza, only opens the road to pantheism and fatalism. Pushed to its ultimate results by pure reasoning, — unchecked either by the promptings of conscience, the observation of nature, or the word revealed in Scripture, — it denies creation and every other form of miracle, rejects the doctrine of a providence or the moral government of the world, annihilates the distinct personality both of man and God, and, by setting up an *immanent*, instead of an *efficient*, cause of the universe, really accounts for nothing, but leaves us precisely where we were at the outset. The third; the childlike and Christian idea of God satisfies the heart and conscience indeed, and furnishes an adequate guide to life; but, if unsupported by submissive faith in the teachings of Scripture and the Church, it does not answer all the claims of the cultivated intellect. Its tendency is to anthropomorphism. The Infinite and Perfect One, the Author and Finisher of all things, appears too much under the similitude of a glorified human being, with many of the attributes, and even the passions, which we recognize in ourselves. He wills, desires, and purposes, thus apparently laboring to accomplish something not yet within his reach, instead of resting in his infinite perfections. He is mutable, a jealous God, in turn angry and pleased with his people, inflicting punishment, and then again repenting him of the evil which He hath caused. We find it hard to reconcile the evil which is in the world, the inequitable distribution of happiness between the righteous and the wicked, with his omnipotence, his perfect wisdom, justice, and goodness.

But what then? Are we to rest satisfied with either of these three forms of the Idea, taken separately? or ought we to seek rather to mould them into one, thus eliminating what is crude and unsound, supplying what is imperfect and defective in each, and appealing to the well-known limitations of human thought to account for what might otherwise seem inexplicable, and to lead us to accept different aspects of the same truth, even when they may appear irreconcilable with each other? In order to answer this question, we must examine each of the three forms of the Idea more particularly, and show how the second and third are evolved from the elements of the first.

The Innate Idea of God has, I think, a threefold root in human nature: first, in man's intellect or cognitive faculties; secondly, in his sensibility and affections; and thirdly, in his conscience or moral nature. The first of these has been clearly and fully stated and illustrated by Descartes. Man needs but little reflection and experience, in order to become fully aware that he is a finite, limited, imperfect, and dependent being. In the eloquent language of Pascal: "Man is the feeblest branch of nature; but he is a branch that thinks;" and this thought soon teaches him the feebleness of his powers, the contingency and shortness of his life, and the limitations of his knowledge. Yet, by that wonderful law of mind which ordains that no one idea can be fully grasped without revealing to us its opposite or contradictory, man cannot know himself without also knowing God; he cannot recognize his own weakness without contrasting it with omnipotence, or the shortness of his life without setting over against it an eternity, or the uncertainty alike of his continuance and his knowledge without having a glimpse of the necessary existence and omniscience of Him from whom his own being is derived. In a word, the imperfections of man reveal the perfections of his Creator; and as these perfections cannot be suggested by outward nature, — where also every thing is finite, limited, and contingent, — it must be God's own act which thus lights up in the human soul a revelation of himself. It is this first root of the Innate Idea which, when taken by itself to the exclusion of the other elements, and rigorously developed, by strict *deductive* reasoning, into all its logical consequences, constitutes what I have called the metaphysician's idea of God.

Again, the sensitive or emotional part of our nature is marvellously adapted to the condition in which we are placed, and to the relations in which we stand to other beings. The love of society, the affections of kindred, the thirst for knowledge, the stirrings of

ambition, emulation, wonder, sympathy, pity, the appetites, — all are desires and needs *which have their appropriate objects*, and incessantly spur us to exertion, that these objects may be attained and these necessities of our nature be gratified. Foremost among these primitive emotions must be placed *the religious sentiment* — that mingled feeling of awe, veneration, trust, and worship, for which, certainly, no finite being can be an adequate object, and which cannot be of artificial or arbitrary growth; since all religious training, all theology, appeals to it, is based upon it, and without it would be impossible. In itself considered, and without culture, it is but a blind impulse or craving, is easily perverted, and is the fruitful mother of countless superstitions. But it is as ineradicable as any of the primitive affections; and the very evils which have grown out of it when unregulated, or ill-regulated, attest alike its fervor and its force. Of course, when acting separately, or even when somewhat modified by the third root, which we have still to consider, it is the germ of what may be called the child's idea of God.

Lastly, conscience or our moral nature reveals to us a law of inherent and imperative obligation, overriding all considerations of prudence or expediency, assuming to bridle our most vehement desires and strongest passions, and asserting its own supreme authority over all other laws and precepts whatsoever. It speaks not to compel; it has no constraining force, no outward sanction; it needs none. It recognizes our absolute free-will. We *may* disobey it, if we will. But even in our disobedience, we still recognize its majesty, its rightful rule; and remorse, the stings of conscience, inevitably come to punish the transgression. It seeks no support from extraneous sources. On the contrary, all human and divine law is based upon it, presupposes it, appeals to it, and without it has no binding force whatsoever. It is not infused by education; it cannot be taught. I do not admit the precept, *Fiat justitia, ruat cœlum*, because I find it written in a book, or because my elders and betters have enjoined it upon me, any more than I accept for such reasons the axioms and the theorems of geometry. It is not derived from observation; for observation can only teach me what is; while this law proclaims something entirely different, — what ought to be. Its demands are very broad; it simply requires *perfect* honesty, purity, and truth, not only in outward act or speech, but in inward purpose. There is no such thing as half-way justice or qualified veracity; for what is wrongly so called is not honesty or veracity at all. Now what is the very nature of a

law? It is a command, the expression of a will; it presupposes a lawgiver and a government. That is the very meaning of the word. Then the voice of conscience is the voice of God, or rather of a Providence, — that is, of a God who governs the world, and who, by the contents of this law, reveals to man His own nature and attributes, even perfect holiness, justice, and truth.

This might, perhaps, be regarded as a fourth, the moralist's, idea of God. As it seems to me, however, its distinctive function is not so much to furnish an independent conception of Deity, as under its peculiar form of a supreme law and ultimate standard, to modify and regulate the development of the other roots, and to be the tribunal of final appeal in determining their relative pretensions. Exclusive attention to its dictates, — not modified by any consideration of its extreme fallibility, when diverted from its proper office of regulating one's *own* thoughts and actions to that of passing judgment upon the conduct of others, — is the source of that fretful criticism of the ways of God with man, that discontent with the moral government of the world, which so frequently constitutes the skeptic's argument, or rather his excuse.

These are the three germs which constitute the Innate Idea of God in the human soul, and without which, as well as when without reason or language, man would not be man, but a brute. Left to themselves, without culture or reflection, their joint product is only some crude form of religious faith and observance, which, bad or imperfect as it is, still embraces some belief in a superhuman power, who directs the conduct and destiny of man, and to whom worship and obedience, sacrifice and prayer, are due. Even in an enlightened country and age, with all the aids of scientific inquiry and philosophical thought, they may receive only a partial and one-sided development. Their obvious meaning may be more or less perverted, in order to buttress dogmas or fill out systems of speculation. Such, in truth, has been their history. What I have called the metaphysician's conception of God, as wrought out by Spinoza and Schelling, is drawn exclusively from the first of the roots here mentioned, — from that which has its origin in the intellect alone, — leaving wholly out of view the two others, of at least equal authority, which are supplied by the heart and the conscience. Pure reasoning about such abstract conceptions as those of the Infinite and the Absolute, neither of which can be comprehended or fully grasped by the mind, might be expected to lead up to consequences as dreary and appalling as fatalism and pantheism combined. On the other hand, the exclu-

sive cultivation of what I have called the second root, the religious sentiment, that vague and awe-struck consciousness of the omnipresence of "Him in whom we live and move and have our being," can only end in an irrational, if not immoral, mysticism and quietism, perhaps in a rabid fanaticism. Purest and least perverted is that conception of the Deity which is furnished or regulated by conscience, the third root of the Innate Idea. Here, at least, we have the unmistakable announcement of a law which is above all other laws, and of a supreme Lawgiver, whose absolute holiness is clearly indicated in the perfect justice, purity, and truth which he ordains. Herein lies the proof of the conscious personality and will of a supreme Governor and Judge of the universe, in that even the Gentiles, who have not the externally written law of God, yet "do by nature the things contained in the law," and thereby "show the work of the law written in their hearts; their conscience also bearing witness, and their thoughts the meanwhile accusing or else excusing one another." I am not afraid of the anthropomorphism which is involved in such an idea of God, as I see not how otherwise an Infinite Spirit could reveal himself to a finite consciousness. In some sense or other, God must become man, in order that man may know God. This is the probable meaning of the text which declares that we are "made in his image, after his likeness;" and also of that which Paul cites and approves, from an old Greek poet, that "we are also his offspring," and that we should seek after him and find him, "though he be not far from every one of us."

This conception harmonizes perfectly with that which we form of him through the argument from design. For instance, in those two miracles of creative wisdom and adaptive skill, the human eye and the human hand, we find a great number of parts, agencies, and functions, nicely fitted to each other, and all working together by a complex and intricate, yet orderly, process towards the attainment of a definite and highly useful end; and we argue with confidence that there must exist an intelligent and active Being, who had this end in view, and who made this disposition of the parts as a means for its accomplishment. Of course, the God who is thus revealed to us by his works is an intelligent and conscious Being, having foresight and will, acting with a definite purpose, and thus having a personality as distinct as our own. How he can be at the same time both infinite and absolute, we cannot tell, solely because the limitations of human thought do not enable us to cognize either of these attributes. But what then? In like

manner, we cannot conceive either the infinity of space or the eternity of duration. In spite of this inability, however, we not only believe, but we know, that space is infinite and duration is eternal, — a beginning or an end to either being impossible. As elsewhere, so here, we find ourselves situated at the confluence of three immensities and two eternities; and as this incomprehensibility of our position in the universe does not lead us to doubt our own existence, so the perfectly similar incapacity of human thought must not induce us to question either the existence or the perfections of Him who made and placed us here.

We must supplement and correct the imperfect conception of God which is drawn from either of the three germs of the Innate Idea taken singly, by adding to it each of the others. We must not sublimate him into a mere abstract idea, *aliquid immensum infinitumque*, nor humanize him into a likeness of any of the imperfections of man. We must believe that God is both Infinite and Absolute, at the same time that he is personal; though we know not *how* he is so. To believe this, as Mr. Mansel remarks, is simply to believe that God made the world. "Before the mountains were brought forth, or ever thou hadst formed the earth and the world, even from everlasting to everlasting, thou art God." *Then*, before anything was created, he was All in All, Infinite and Absolute, because nothing then existed which could limit his perfections, or to which he could be in relation; One, because the Infinite and Absolute cannot be plural or consist of parts; Cause of all things, because he existed before all things; *Causa sui*, or necessarily self-existent, because there was nothing before him whence his being could be derived; All-holy or perfect, because evil or sin is an imperfection, and therefore cannot coexist with the Infinite. Hence it is, as Hegel declared, that any philosophy of the Absolute assumes to know God as he is in his eternal essence, before the creation of nature and of a finite spirit. But then creation at any particular moment of time becomes inconceivable to human thought; for if causation is a possible mode of existence, then that which exists before causing is not infinite; and that which becomes a cause has passed beyond that which formerly limited its modes of being.

But again, I ask, Is this inconceivability of creation a proof that creation is really impossible, or merely that human thought is limited? If the former, then the doctrine is self-contradictory; for it asserts that there is something which even Infinite Power cannot do, namely, create. He who assumes to know what

an omniscient and omnipotent God can or cannot do, really declares that he is omniscient himself. In like manner, I cannot see *how* suffering and sin can exist in a world governed by an infinitely good and infinitely powerful Being; but this is only an assertion of what *I cannot think*, not of what an Infinite God *cannot do*. I cannot see even how infinite justice can coexist with infinite mercy, inasmuch as punishment for sin is absolutely required by the one, and absolutely forbidden by the other. But their coexistence is surely not prevented by this inability of my thought; since they must coexist, or they would not both be infinite.

But the doctrine which we are specially interested to maintain is, that neither of these three forms of the idea of God has any claim to paramount authority, so as to constitute the ultimate standard by which either or both of the others is to be tried. They stand side by side, with equal claims to attention and respect. Each is primitive, innate, having its root in the inmost constitution of our being, and equally corroborated by the teachings of nature and the express declarations of holy writ. Do what we may, we cannot entirely silence either of the three utterances of the divine voice speaking to the soul of man. We cannot eliminate or wholly shut our eyes to any of the aspects under which God is manifested to human consciousness. Each is needed to supplement the others; for either, taken separately, is but a mutilated and unworthy image of the Divine Essence. Each organ of our spiritual life acts independently, by its own laws, and repudiates encroachments by a foreign power upon its own domain. The intellect, when acting deliberately, refuses its assent to conclusions prompted by the tastes and desires, and, in turn, experiences stout resistance when attempting to eradicate primitive impulses or change the objects of the emotions. Conscience rebels when casuistical reasoning seeks to pervert its dictates, and when appetite or affection lures it to go astray; but the balance of authority shifts to the other side, when our matured and well-reasoned convictions declare that the moral nature is acting hastily and impulsively, so as to overleap its natural boundaries and deprive reason of its due. It is mere pedantry to regard man as exclusively a reasoning animal, and logic as the sole guide to truth and right. Frequently our best actions are suddenly prompted by strong affection or by intuitive perceptions of honor and duty; and the highest truths are often spiritually discerned, just where the intellect is baffled, or lags behind with a feeble step and an uncertain speech. True, we can-

not precisely mark out the boundaries of the provinces within which each of these faculties reigns supreme; but we can still see that their provinces are really distinct, and any decided encroachment upon either of them is both a harm and a wrong.

That conception of Deity which is worked out by the intellect alone has no claim to be considered a fairer likeness of Him than the far different picture presented by the sensibility and the conscience. We are not to throw out the attribute of personality because it is inconsistent with the metaphysician's idea of God, or refuse to believe that he is immutable because he hears and answers prayer, or deny either his omnipotence or his benevolence because there is evil in the world. In either case, the attribute which we vainly seek to eliminate rests upon precisely the same basis of evidence as that which we wrongfully permit to dominate the whole idea. The truth presents itself under a triple aspect; the fact that we cannot reconcile them argues only our ignorance and incompetency, not our power to set bounds to omnipotence.

Pure *ideas*, as such, it is admitted, can never have objective reality, as they represent a completeness and perfection to which no phenomenon of experience, existing under all the limitations of time and space, can possibly correspond. Thus, virtue and wisdom in their perfect purity can never be presented in the world of sense, but exist only in contemplation, as aims of effort or guiding stars pointing out directions of progress. But it is otherwise with *ideals*, considered as actually existing in the concrete, and therefore as individual beings or entities, though determinable or determined by the idea alone which shines out through their acts. As the *idea* provides only a rule in the abstract, so the *ideal* serves as an archetype for the perfect determination of the copy. But here the Divine must be mingled with the human, before there can be an adequate presentation of the great pattern and exemplar. The Saviour of the world is the only actual *ideal* that has ever appeared to human vision. And it is precisely on account of his divine character and mission, because he is God manifest in man, that he is at once the perfect archetype and the most real of beings. Pure ideas are abstractions, formed by throwing out attributes, such exclusion removing them from the world of realities into the world of pure thought. But God, considered as *ens realissimum*, as the source of being, containing in himself not only the sum, but the unity, of all attributes, is the most real of all that the human mind can conceive of; he is the farthest removed from an abstraction; no predicate can be denied of him without defacing

or breaking his image in the soul of man. He is not merely the Infinite and the Absolute (*aliquid immensum infinitumque*), but he is also the most real of all realities, the most personal of all conscious beings, — a God who hears and answers prayer, who created and governs the universe.

I accept, therefore, the doctrine of Pascal and Hamilton and Mansel. There is an "absolute necessity, under any system of philosophy whatever, of acknowledging the existence of a sphere of belief beyond the limits of the sphere of thought. We must believe, as actual, much that we cannot positively conceive as even possible. If mere intellectual speculations on the nature and origin of the material universe form a common ground on which the theist, the pantheist, and even the atheist, may alike expatiate, the moral and religious feelings of man — those facts of consciousness which have their direct source in the sense of personality and free-will — plead with overwhelming evidence in behalf of a personal God, and of man's relation to him as a person to a person. And by our ignorance of the Unconditioned we are led to the further belief, that behind that moral and personal manifestation of God, there lies concealed a mystery, — the mystery of the Absolute and the Infinite; that our intellectual and moral qualities, though indicating the nearest approach to the Divine perfections which we are capable of conceiving, yet indicate them as analogous, not as identical; and that, consequently, we shall be liable to error in judging by human rules of the ways of God, whether manifested in nature or in revelation."

CHAPTER IV.

Spinoza.

Baruch or Benedict Spinoza was born in Amsterdam in 1632, just five years before the publication of Descartes' first work, the treatise on Method. He was a Jew by birth, but soon ceased to be a Jew by religion, though without thereby becoming a Christian. Hence he was wittily compared to the blank leaf, which, in most editions of the Bible, separates the Old from the New Testament. Yet he was far from being an immoral, or even an irreligious, man. He was rather a religious mystic, a speculative dreamer, so absorbed in meditation on abstract ideas and following them out to their logical consequences, that the world around him, the world of real things, had not only ceased to have any interest for him, but had become enveloped in a haze, had been sublimated into pure thought, and he seemed to himself a shadow moving about among shadows. Leibnitz called him *un moulin de raisonnement*, — an intellectual machine for grinding out syllogisms. Frail and delicate in body (he died of consumption when only forty-five years old); leading the life of an anchorite, not from principle, or by any effort of self-denial, but simply from want of liking for any of the ordinary enjoyments of mankind; irreproachable in character and conduct, gentle and unpretending in manners and conversation, he conciliated not only the good-will, but even the strong affection, of the few ordinary persons with whom the seclusion of his life allowed him to come in contact. One of his townsmen, a good orthodox clergyman, though regarding his pantheistic doctrines with horror, still conceived a strong affection and admiration for him as a man, and wrote his biography as if he were a saint. Less than sixpence a day sufficed for all his personal wants, and he earned that at his trade of grinding lenses for telescopes. A pension, a considerable bequest, a professorship, were offered to him, but he declined them all. Why should he trouble himself with the possession of what he did not want? He had the gentle toleration for any religious sect or church, which arose from per-

fect indifference, and perhaps a little contempt, for them all. He was almost devoid of passions and appetite, and had well-nigh conquered the last infirmity of noble minds, — the love of fame. His greatest work — the only one that contains a full development of his system — seems to have been left in his desk in a finished state for several years, and was only published after his death.

From Leibnitz, who had at least one brief interview and conversation with him at the Hague, and from other sources, we learn that he was slender, olive-complexioned, and consumptive in appearance, having somewhat the aspect of a Spanish Jew, and that he spent nearly all his time solitary in his poorly furnished chamber. There he died, alone, while the family who lived in the same house were absent at church.

Such a life and character, in connection with such opinions, appear to many a strange phenomenon. It does not seem so to me. To a mind of a quiet and reflecting cast, when ill-health or other causes have created a disinclination for out-door pursuits, there is a strange fascination in abstruse studies, especially in metaphysics and mathematics; and the vein of mysticism that lurks in every intellect, with its inevitable concomitant, an insufficient appreciation of matters of fact, is soon developed. Spinoza's peculiar opinions were not more the outcome of his intellect, than of his character and temperament. Pantheism is a doctrine of the unreality of things around us, the illusions of the phenomenal and the transitory, and the absorption of all individual existences into the universality of abstract being. It feeds our wonder, our vague aspirations, our spirit of physical indolence and dreamy contentment. It teaches not merely self-abnegation, which always requires an effort, but the annihilation of self, which is spontaneous. It is a doctrine of fatalism, also, and when held in full belief, it nourishes acquiescence, the cessation of passion and effort, and a sort of religious quietism.

Though the characters of the two men, and the tendencies of the two philosophies, were so unlike, Spinoza was indebted to Descartes not only for the first hints, but for the whole foundation, of his system. Even in boyhood, he became a zealous disciple of the man whose fame was already mounting to the zenith; and his earliest publication was a sort of synopsis of the principles of the Cartesian philosophy, without any conscious admixture of original speculation. But his mind, once aroused, was too thoughtful and fertile to rest long in the doctrines of another. Large portions of the Cartesian system soon dropped out of his view altogether, and

his attention became eagerly concentrated on what was left, which seemed to lead by necessary implication and logical sequence to a long train of startling conclusions. Spinozism is an exaggerated development of one side of Cartesianism. Descartes began at least with two concrete facts, Thought and Self. Spinoza dropped both, and commenced with a definition, *an arbitrary one*, of a pure idea. His whole philosophy is founded on Descartes' definition, somewhat modified and expanded, of Substance, as "that which exists *in se* (or without a cause), and is conceived *per se* — in itself; that is, which, in order to be conceived, does not need a prior conception of anything else." Another of his definitions, and the leading one of his system, is borrowed in part from the Cartesian argument for the being of a God. "A thing which is its own Cause, or is self-caused, *i. e.*, which exists *in se*," he says, "is that the essence of which involves existence, or whose nature cannot be known except as existing." Obviously, the former of these is so framed as to exclude in the outset all individual and real objects from the definition of Substance, and thereby to take for granted his whole doctrine. First assume the unreality of our own minds and of every thing around us, by limiting the definition of Substance to being *in et per se*, and thereby denying the substantiality of an *ens causatum* or *ens per aliud*, and it follows immediately that the Infinite First Cause is the only true Substance, — and hence that God is every thing and every thing is God. What need, then, of all the remaining definitions, axioms, theorems, and other apparatus of geometrical proof? This definition alone is Pantheism in a nutshell.

When we wish to distinguish a Substance from its Attributes, it is, of course, correct to say, that the latter can be *conceived* only through the former, that is, through something in which they inhere, — *per aliud;* whereas the former, Substance, is *conceived per se*, as a ground of the Attributes, but a ground which is independent of them. But what authorizes Spinoza to affirm that Substance not only must be *conceived per se*, but must *exist in se;* that it does not need a prior conception of anything as its *Cause*, the origin of its being; and hence, that the only true Substance is self-caused, the essence of which involves existence, — that is, God? We are immediately conscious, as Descartes says, of ourselves, of our own personal existence, conscious of it independently of its manifestations; we can conceive of it not only as acting, but as at rest; not only as thinking, but in the intervals of thought, feeling, or action. Then I am myself a true

Substance, which can be *conceived per se*, but certainly cannot *exist in se;* for I am finite, limited, and dependent, so that there must have been — there must be — a Cause, or I should instantly lapse into the nothingness whence I was drawn. The initial and pervading fallacy of Spinozistic reasoning is the unfounded assumption, made at the outset, and continued throughout the argumentation, that Substance, *in order to be Substance*, must both be *conceived per se* and *exist in se;* that is, must exist without a Cause.

But it may be said that Spinoza has a right to make what definitions he pleases of the technical terms that he employs, provided he is consistent in the use of them, adhering to these definitions throughout. He has a right, for instance, to consider God, because He is infinite and self-existent, as the only true Substance, or Substance in the highest sense of the term. Very true; this is precisely what Descartes did, who admitted human beings and other contingent existences to be substances only in a secondary and derivative sense. But then Spinoza has no right subsequently, as the conclusion of his philosophy, to pass from his ideal distinctions to the world of real things, and take for granted that he has proved human beings and other finite existences not to be Substance *in any sense, i. e.*, not to be realities, because he has shown that they are not Substance in his sense. He ought not to deny the reality of the *ens causatum*, because it does not come within his definition of the *ens in se*. There is a wide difference between subjective definitions and objective facts. From premises hypothetically assumed, it is illogical to draw any conclusion respecting the universe of realities.

The second definition which I have quoted is based upon the Cartesian doctrine, that a Cause is necessary, not only for the beginning, but also for the continuance, of existence; and this, as already observed, confounds the relation between Cause and Effect with that between Substance and Attribute. In order to prove his doctrine of continuous creation, Descartes was obliged to assume that created things, because they are Substances only in a secondary and derivative sense, have no virtue in themselves which enables them to exist, and therefore have no continuous existence, but are perpetually fading out into nothingness; like the light of the sun, if not at every moment renewed by fresh undulations proceeding from the great central luminary, they not only disappear, but really cease to be. Then they have only a sort of shadowy or counterfeit being; they are always *becoming*, but never really *being*. As Plato expresses it, they are τί τὸ γιγνόμενον μὲν

καὶ ἀπολλύμενον, ὄντως δὲ οὐδέποτε ὄν. Then, too, like the sunlight again, they are not Substances in themselves, but only the changing manifestation of an attribute of the only real Substance. Here Spinoza is not exaggerating one of the doctrines of his predecessor, but only drawing an inference from it, which, however logical and obvious, Descartes failed to see. Still building upon Cartesian foundations, Spinoza next avails himself of the ontological argument for the being of a God, by converting it into a definition of *Causa sui*, or that which, as self-caused, does not need to be created, but exists *in se*. That, he says, is *Causa sui*, "the essence of which involves existence, or whose nature cannot be known except as existing." This alone he assumes to be Substance properly so called.

But strictly speaking, nothing can be *causa sui*, self-caused; for in order to be caused at all, it must have begun to be; and before the beginning of its existence, it cannot have been the cause of anything, not even of itself. What is meant by calling it "self-caused" is simply, that it is self-existent or eternal; that is, that it was not caused at all. Otherwise interpreted, *Causa sui* is merely First Cause; that is, First Cause of every thing else, but not of itself, for that is absurd. And we do not make the definition more intelligible by adding the Cartesian doctrine, that the essence of it involves existence; for it must exist before it can have any essence, so that, logically, the essence can neither be the Cause nor the reason of its being. *Non-entis nulla sunt attributa;* there are no attributes, and consequently no essence, of a nonentity.

Hence, as Schelling remarks, Spinoza's system, and every other pantheistic system, maintains that "*in Deo, essentia et existentia unum idemque sunt.*" His existence is not something different from his essence, but is that essence itself. He is, as the French would say, *Celui qui est;* or in Hebrew phrase, "I am that I am." This is the proper idea of him, for it is what the word, God, means. Because he is nothing else than "the Existing," we must hold that existence is not one of his peculiarities or attributes, — is not an attribute at all, or in any sense, — but is his inmost Being. This ineffable Being is expressed in the two attributes, extension and thought, one or the other of which we apprehend as the necessary form of all existence; and each of these attributes, again, is manifested in an infinity of particular and transitory Modes. Spinoza's whole system, indeed, is only an expansion of the two ideas, primarily derived by him from Descartes, of Substance and Necessary

Existence; and these two he reduces to unity by identifying each with the other.

The fundamental fallacy of this artificial and elaborate system may be pointed out in still another manner. Substance, in the Spinozan sense, is merely an abstract general idea or class-name — what the Logicians call a Concept; for it is pure being — *ens* — considered both *in se* and *per se*, — that is, anterior to and apart from its modes or particularizing attributes, and therefore is one, and not many. But so is every general abstract idea or concept, — *man*, for instance; for, considered simply as man, apart from the qualities or accidents which distinguish one particular man from another, he is *man in general* — humanity, human nature — the one common human element manifesting itself alike in all individual men. Of humanity as thus considered, precisely because it is a mere idea, and therefore has no relation to time or space, neither unity nor plurality, neither beginning nor end, can be predicated. We cannot assign it to any one determinate place, or to any definite time, more than to another, because we do not even attribute to it actual existence in the same sense in which we attribute reality to individual things. In like manner, *circle*, considered *in se* and *per se*, — that is, in the abstract geometrical definition of it, is neither one nor many, neither begins to be nor ceases to be, for in truth it does not exist at all, except in the mind of him who conceives it; but as a class-name, it is equally applicable to any and every particular circle which you can draw or think of. Now Spinoza takes as the foundation of his system, not the concept of a definite and limited class of things, such as man or circle, but the most comprehensive of all concepts — that which includes all others, namely, *substance* in the abstract, or pure being — *ens* or *esse*. Of course, *every thing is substance*, for this is only saying that every thing is or exists. Hence he rightly says, *in rerum natura, nihil datur præter substantias earumque affectiones*. This follows from the logical axiom of Excluded Middle, which declares that A and not-A, "horse" and "not-horse," include the universe. For as he defines substance as that which exists *per se*, and mode or affection (what we call quality or attribute) as that which does *not* exist *per se*, but *per aliud*, it is evident that substance and mode, taken together, include the universe. But this holds true not of any individual substance and mode, but only of the class-name of substances and the class-name of modes, this class-name being single, while the things belonging to the class are indefinitely numerous.

What Spinoza calls the Attributes of a thing are what we should call its *necessary* attributes; since these alone "express," or are the necessary results of its essence. The other attributes — "accidents" the old logicians call them — are merely its temporary forms or "Modes." Thus, if a lump of *wax* be taken as an example of material substance, its extension and impenetrability are its necessary attributes, or Attributes in the Spinozan sense; for, without these, if it were not extended and impenetrable, it would not be wax, it would not be material substance, it would not exist at all. On the other hand, its particular color, its liquid or solid state, its hot or cold condition, its spherical, elongated, or cubical shape, are its Modes. Thus Spinoza and Malebranche, following St. Augustine and St. Anselm, will not even allow us to say "God is good," "God is just," etc.; as this would seem to imply that the qualities in question are mere accidents or modes, and therefore might be changed without his ceasing to be God. But they say God *is* goodness, God *is* justice, and the like, which implies that he cannot be anything else than this without ceasing to be Deity. Hence, also, comes the Scholastic dogma, that any one of these necessary attributes perfectly expresses the essence of Divinity, so that, in him, all attributes are *one*, — there is no plurality of attributes or plurality of essence; but he is absolute unity, which one necessary attribute, again, expresses his whole essence or inmost being. When we say, argues St. Anselm, that a particular man is just, we mean simply that he participates in justice, or has a share in this virtue along with others, who also partake of it. But the infinite and perfect Being does not share his perfections with others, as this would be to diminish their completeness in himself. Then he must be justice itself; he has it not, but he is it. As much can be said of every quality or quantity which is attributed to him; all that he is, he is substantially, or as Substance, not as Attribute. This is not saying that he is an assemblage or aggregate of all good qualities; for a compound is indebted to its elements for all that it is; it is formed by them and exists only in relation to them. But God is the one supreme good expressed under different names. He is absolutely one.

Spinoza's sixth definition is of God, by which, he says, "I understand an absolutely Infinite Being; that is to say, a Being consisting of an infinity of attributes, each one of them expressing an eternal and infinite essence;" "absolutely infinite," he explains; and not merely "infinite in its own kind," or in certain respects. Thus, a geometrical line may be infinite in one respect, namely, in

length, but not in breadth or thickness; a surface may be infinite in two respects, length and breadth, but not in thickness; and so on for any finite number of respects. But the absolutely infinite Being or Substance has an infinite number of respects or attributes, since every thing which expresses an essence, and does not involve any negation, belongs to its essence; in every light in which this eternal Being or Substance can be viewed, he is infinite.

To our finite comprehension, however, there are revealed only two attributes, namely, extension and thought. To us, consequently, God appears under the attributes of infinite extension and infinite thought. These two, though infinite, do not limit, and so negative, each other; because, as Spinoza explains in his second definition, "a thing is said to be *finite in its own kind*, when it is limited or bounded by another thing *of the same nature*. For example, a body is called a finite thing, because we can always conceive it as part of a greater body of the same kind; in like manner, a thought is finite because limited by another thought. But body is not limited by thought, nor thought by body, since these are of different kinds." Both may be infinite together.

Here, of course, Spinoza is borrowing from Descartes the noted radical distinction between mind and matter, that they have nothing in common, since thought is the essence of one and extension the essence of the other. But Spinoza maims and defaces the doctrine in the borrowing; for he strikes out the two separate *substances*, namely, mind and matter, in which Descartes conceived thought and extension respectively to inhere, and gives them one universal substance, as their common ground. A great dispute still exists, whether Spinozism annihilates the universe, by resolving it into Deity, — in which case the system is pure Pantheism, or Acosmism, as Coleridge prefers to call it; or whether it annihilates Deity, by resolving God into the universe, — in which case the joint conclusion is Atheism and Materialism. The true interpretation is, that it annihilates *both* God and the universe, by resolving both into the inconceivable abstraction of a universal Substance, which is to us, because inconceivable, a nonentity; and thus the proper result of the system is Nihilism. Just so with the later German forms of the doctrine. Schelling teaches that subject and object, or mind and matter, are equal and parallel developments of their common ground, which is "the Absolute;" and he frankly admits that the Absolute is inconceivable to thought. And Hegel in fact comes to the same result, when he explicates the ground of the two as the Indifferentism of pure being and nothing, and causes

thought to oscillate between them through the notion of *becoming;* when, by one swing of the pendulum, nothing becomes pure being, which is creation, and by the opposite swing, pure being becomes nothing, which is annihilation.

As we are now in the seventh heaven of transcendental metaphysics, let me attempt to construct a ladder, on which common understandings may rise to some faint apprehension of what we are talking about. Logic teaches us this law of thought, that as we diminish the intension of a concept or class-notion by abstracting attributes, we thereby enlarge its extension by admitting more objects, thus taking successive steps of higher and higher generalization. For example: from the concept of the class *Mammalia,* take away the attribute "suckling their young," and we have the larger class *Vertebrates;* from Vertebrate, abstract the attribute "having a spinal column," and there results the still larger class *Animals;* from Animal remove "sentient life," and we have the yet broader notion *Organic Substance;* from this take away "organism," and there is left the still more abstract and comprehensive term *material substance,* or matter; now remove solidity or impenetrability, and the notion rises and broadens to *something extended,* geometrical form; then take away abstract extension (the last attribute there is to abstract) and we have *anything, all things,* existence *per se,* what Spinoza calls Substance, or absolutely Infinite Being, God.

Now reverse the process, and begin to endow, though sparingly, this sublimated notion with attributes again. Give it thought, and we have *thinking substance;* give it extension and we have *extended substance.* But what we have now given is only attributes; the substance in which both thought and extension inhere is still one and universal. For, argues Spinoza, in his fifth theorem, "There cannot in the nature of things be two substances of the same nature;" for then the essence of this common nature would express itself in the same attributes; and identity both of nature and attribute can exist and be conceived only as identity of substance. Neither can diversity be proved by difference of modes or accidents; for substance being logically anterior in nature to its affections, (for instance, the substance of wax must exist before it can be moulded into any particular form,) if we abstract from the modes, there will be nothing to differentiate this from any other substance. The ground must be common, must be one. Take away the modes or particular affections from *wax* and *iron,* for instance, and they become (to our conception, at least) one

common substance, matter, having the single attribute of extension.

In his eighth theorem, Spinoza proves that this one substance is necessarily infinite. "It cannot be finite," he says, "for then this substance would be limited by another of the same nature, and we should have two substances of the same nature and attributes, which has just been shown to be impossible. Then it must be infinite." It must also be eternal, for there is no other substance to be its cause; and indeed, by the definition already given, substance is that which exists and is conceived *per se*, not needing a prior conception of a cause, or of anything else, in order to exist. Then it is self-caused; its essence involves existence; it is eternal.

We see then, the general result of Spinozism. It can only be symbolized, and with a larger use of figurative language than I like to employ. All individual things, whether of mind or body, and the broad universe which they people, are dissolved into a boundless and eternal ocean of pure being. Waves rise upon its surface, only to fall again into the broad expanse from which they were uplifted, and with which they are, in substance, identical. Whether they take the form of extension or thought, it matters not; in either case, they are but manifestations of one and the same nature and essence. All particular existences, all that seems individual being, are only bubbles that fret, or vapors that rise from, this ever-heaving and shoreless sea; and they will soon break, or be collected in drops, and find their way back to identity with that which is at once their birthplace and their tomb. The differences by which they seem to be distinguished from each other are but fleeting modes or accidents of mist, cloud, and rain, which the common element puts forth for a brief while, and then withdraws into itself. The heaving and subsiding, the phenomenal movement and change, are not produced, as in the case of the real ocean, by any cause operating upon the mass from without; for there is no such cause, no existence whatever, which is foreign or external to it; its own being is one and all. An internal principle of change, an immanent or inbiding cause, keeps up the ceaseless agitation which is its nature. These infinite mutations of form with ceaseless persistency of matter are vividly imagined in Shelley's striking poem, "The Cloud," of which I quote a single stanza: —

> "I am the daughter of earth and water,
> And the nursling of the sky;

I pass through the pores of the ocean and shores;
I change, but I cannot die.
For after the rain, when with never a stain
The pavilion of heaven is bare,
And the winds and sunbeams, with their convex gleams,
Build up the blue dome of air,
I silently laugh at my own cenotaph,
And out of the caverns of rain,
Like a child from the womb, like a ghost from the tomb,
I arise and unbuild it again."

This conception of Immanent Cause brings out the doctrine of necessity, or the absence of freedom, which is the grand characteristic of the development of Spinoza's system. The phenomenal aspect of the universe — what appears to us — is an endless succession of changes, not occurring at random, but uniform in sequence, or, as we say, subject to law. We give the name of cause to the regular antecedent, and that of effect to its uniform consequent; but we nowhere discern, we never can discern, any causal connection, any real bond of union, between the two. There is nothing but invariable, eternal antecedence and consequence; everywhere the immutability of law. Every event, of course, is surrounded by other events, and must be viewed as *necessarily* following those which preceded, and *necessarily* followed by those which come after it, and thus as forming one link in an adamantine chain which stretches from eternity to eternity. Each and all are but the immanent movement, the internal law of change, which is the inmost being of nature or the absolutely infinite Substance; it is the groundswell of the vast ocean, the self-produced agitation of the fathomless depths, the panting of the mighty bosom of the universal mother. Every volition even, every act of a conscious agent, is preceded by certain states of mind, all involuntary, on which it is necessarily consequent; and these mental states are the inevitable results of physical changes in the world without, and these again of others, all entering into the line which stretches from infinitude to infinitude. The power or necessity, which now is, has existed from eternity, and has come down to us through an interminable series of events, never relaxing its iron grasp, never varying in intensity, — a blind and unconscious God.

And yet Spinoza has his notion of what Freedom is. In his seventh definition, he says, "a thing is free when it exists from the mere necessity of its own nature, and is determined to act only by itself; a thing is necessary, or rather constrained, when it is determined by something else both to exist and to act according

to a determinate law." As if one were any the more free, when determined by an internal necessity, than if he were irresistibly impelled from without! In this sense, nature is a cause, but a cause only of itself; it is, in Spinozan phrase, *natura naturans*, or nature working out itself. It is only contemplating the other side of the same idea, to regard nature as an effect — *natura naturata* — nature worked out by its own inherent laws. In truth, the theory destroys all notion of the relation between cause and effect, by merging the notion of the two terms into one, that of inevitable sequence.

However others may regard it, this conception of the absolute universality of immutable law seems to me not more sublime, than it is appalling. Existence would *not* be worth having in such a sheet-iron universe, with heavens of brass and a heart of stone. If one could believe it — thank God that I do not! — it would drive him to suicide; for what would it matter, *when* one bubble more should break on the surface of that cruel waste of waters, — that dark abyss of soulless being?

I will now translate as literally as possible a few of Spinoza's theorems, by way of recapitulation, and to show that I have fairly represented his theory. The 14th: "No other substance can exist, or even be conceived, except God," and "All that is, is in God; and nothing can be, or be conceived, without God." The 18th: "God is the immanent, but not the transeunt cause of all things." The 26th: "Every thing which is determined to this or that action, has been necessarily determined to it by God; and if God did not determine a thing to act, it could not determine itself." The 28th: "Every individual object, every thing, whatever it may be, which is finite and has a determinate existence, can neither exist nor be determined to act, except it be determined to existence and action by a cause, which is also finite and has a determined existence; and this cause itself can only exist and be determined to act by a new cause, finite like the others, and determined as they are; and so on to infinity." The 32d: "The will cannot be called a free, but only a necessary cause;" and hence, as a corollary, "God does not act by virtue of a free will; . . . . and consequently, *will* does not belong to the divine nature, any more than all other natural things; but the will has the same relation to the divine being that movement and repose have, and every thing else which results from the necessity of the divine nature." The 33d: "The things which have been produced by God could not have been so produced in any other manner, or in a different order."

Absolute being is identical with absolute activity. To be, is for God, to act; to act is to produce; to produce is to run through and to fill out all the degrees of existence; just as any one material substance unceasingly manifests all its attributes. God produces at first thought and extension, which are the necessary expression of his essence. From thought and extension eternally proceed infinite modes or affections of thought and extension, which contain in themselves other modes, though of a lower degree of perfection; since every mode is more or less perfect according to the longer or shorter line which unites it to the source of being. Body, according to Spinoza, is a mode which expresses in a determinate form the essence of God, so far as God is regarded as an extended being. The human soul is a succession of modes of thought which represent his essence so far as he is a thinking being. Man himself is the identity of a human soul closely united with a human body. The two perfectly correspond with each other, — impressions on the organs with sensations in the mind, and volitions in the mind with movements of the muscles, — because the one expresses the thought, and the other the extension, of one and the same substance. What God is as body, at a determinate moment of his development, that he thinks as soul; and the result is man. Body and soul are but one and the same being with two aspects, or, so to speak, a single ray of light, which is decomposed and doubled when it reflects itself in consciousness. There is no physical action between soul and body; there is only a metaphysical union of them in God. The human soul is not properly a being — a thing; it is not substance which constitutes the form or essence of man. The human soul is a pure mode — a pure collection of ideas; the body is a pure mode or aggregate of the forms of extension. The reality of an aggregate is resolved into that of the elements of which it is made up. "The soul, in so far as it knows the body and itself under the character of eternity, — that is, as necessarily existing, — necessarily possesses the knowledge of God, and knows that it is in God, and is conceived by him."

CHAPTER V.

MALEBRANCHE.

STILL following the line of the immediate disciples and continuators of Descartes, we pass from the mystical pantheism of Spinoza, to the gorgeous imaginations and fervid eloquence of the Christian Plato, Malebranche. We found Cartesianism modified by theological indifference or unbelief in the former; we shall find it still more changed in the latter by religious enthusiasm, by a fervent and meditative piety, nursed by seclusion and study into a beatific vision of the intimate union of the human soul with God. With very dissimilar antecedents, and even opposite tastes and predilections, the speculations of the two still led to parallel, and, in many respects, to identical results. The God-universe of the one was dissolved into the infinitude of universal substance; the activity of the human intellect was merged by the other into a mystical perception of all things in God, his philosophy adopting in its literal sense the fervent saying of the Apostle, "In him we live, and move, and have our being."

Born one year after the publication of Descartes' first work, in a family of some rank and wealth, but cut off from the pursuits of temporal ambition not more by a feeble and sickly body, proceeding from a distorted spine, than by strong attachment to letters, philosophy, and religion, Malebranche found in early life a congenial retirement among the Fathers of the Oratory. The members of this remarkable association, one of the best belonging to the Romish Church, were not bound to their order by perpetual vows like the monks, but were attached to the secular priesthood in full standing, though without parochial duties, and were free to leave their retreat at any time when inclination called them back to the outer world. The cultivation of letters and philosophy, the instruction of the young, and the exercises of practical piety, were their only employments while they remained in the Oratory. Such a fraternity was a fitting home for Malebranche. After he had been ten years a member of it, accident made him acquainted with

Descartes' first publication; and the study of this work developed in his mind a system of Christian philosophy, the exposition and defence of which occupied the remainder of his life. His writings, which are voluminous, had great popularity and success, for he was one of the founders and masters of ornate and eloquent French prose, the contemporary and rival of Pascal, Bossuet, and Fénelon, and perhaps superior to them all in lofty flights of the imagination and in the wealth and vivacity of his illustrations. Religious enthusiasm and the thirst for knowledge in the world of pure and abstract ideas seem constantly striving in him for the mastery, clothing the most abstruse speculations of metaphysics with the fervent aspirations and prayers of pious sentiment and faith.

"O Lord Jesus," he exclaims, "my strength and my light! Can I obtain from thee to know what I am, and what is this substance in me which is capable of knowing the truth and loving the good? I am; but for how long? Am I eternal, or shall I cease to be? I am, but what am I? I think, but how? When I think of bodies, I see well what they are capable of; I compare them with each other, and discover their mutual relations. But whatever effort I make to represent me to myself, I cannot discover what I am. When I suffer any pain, I am conscious of it; but I cannot comprehend what the pain is, nor what relation it can have either with me, or with that which surrounds me. In a word, I am but darkness to myself, and my own being appears to me unintelligible. If thou dost not enlighten me with thy light, the very love which I have for the truth will only precipitate me into error; for I feel myself inclined to believe that my substance is eternal, that I am part of the Divine Being, and that all my thoughts are but individual modes of the universal reason."

There can be little doubt what will be the issues of a philosophy conceived in such a spirit and directed by such a purpose. Its conclusions will be, that we do not *directly* know particular things and sensible objects; we know them only by ideas. It is *intelligible* extension, and not *material* extension that we immediately perceive. In vision, the proper object of the mind is the universal — the idea; and as the idea is in God, it is in God that we see all things. The outward world exists, since God assures us of its reality in his revealed word; but we never perceive it in itself, but only in its idea, as this exists in the omnipresent mind of its Creator.

If Malebranche were only a religious mystic, his theory would

not concern us here. But he is something more, — a philosopher, at once acute, ingenious, and profound, subtle in argument and analysis, bold and comprehensive in his generalizations, and winning assent as much by his breadth of reasoning and command of facts as by his fervid eloquence. Let us endeavor, then, to follow the thread of his speculations, though perhaps no other writer, except Plato, suffers so much by cold analysis and abridgment.

Two leading doctrines of the Cartesian philosophy form the starting points of the theory of Malebranche. The first is the noted distinction between matter and mind, — that the very essence of the former consists in extension, and of the latter in thought; so that there is no parity or community of being between them. The second is the mathematical doctrine, that the criterion of truth is found in clear and distinct ideas, which are true, and cannot be suspected of falsehood without impeaching the veracity of God. How, then, asks Malebranche, and all subsequent philosophy has continually repeated the question, how, then, can there be any communication between two things which are set over against each other as radically unlike, not having a single attribute in common? How can that which is inextended come in contact with extension, so as to be affected by it? Mind is not even a mathematical point, since that is an element of extension, and can be touched by a line or surface, two osculating curves meeting at such a point. But mind has no such point of contact; it cannot be *touched.* Neither can it be operated upon, or in any wise affected or changed without contact, as this would imply that matter can *act* where it *is not;* and as action is a mode of being, this is equivalent to saying that it can *be* where it *is not,* which is a contradiction in terms. Moreover, impulse through contact can produce nothing but motion; and motion, as it depends on relations of distance, which is a mode of extension, can be predicated only of extended substance, but not of inextended thought. Extension cannot even be *imaged,* imagined, or represented, except through extension, since in this respect only can the picture bear any resemblance whatever to the reality. I can represent by lines on a blackboard two feet square the relative magnitudes, positions, and distances of all the bodies in the solar system; but without lines, and a surface to draw them on, such a representation is inconceivable. Then the *intelligible* extension, which is present to my thought, and of which I have a perfectly clear and distinct idea, (this being the criterion of truth,) cannot have any feature in common with material extension, which is an affection of matter.

The enigma becomes still more dark and profound when we pass from sensation or perception, which is conceived as matter acting upon mind, to the voluntary production of motion, as in raising the arm, which is mind affecting matter. How can my thought or volition move an extended substance without touching it? or how, if not itself extended, can it *touch* any material substance?

According to the vulgar notion, the senses are the channels which transmit impressions or images of the attributes of matter to the thinking mind. But we are continually mistaking the affections of our minds, which are the consequences, for the qualities of body, which are supposed to be the causal antecedents, though there is no more resemblance between them than between fire, and the liquefaction of ice which results from contiguity to the fire. Thus, sound is an affection of the soul, which cannot exist anywhere but in mind, since its essence consists in being felt; but its physical cause, the only phenomenon corresponding to it in the world without, is a vibration first of the air and then of the tympanum of the ear. We are conscious only of the sound, and not of the vibration which produces it, the former being in no conceivable sense an image or representation of the latter. In like manner, *warmth* is felt, being purely an object of consciousness; whilst that which affects our organs, and is supposed to create this sensation of warmth, is an unknown fluid, or affection of matter, called *caloric*. So it is with colors, tastes, and smells; they are all subjective affections, or modifications of that within us which thinks. Yet because the mind does not perceive the movements of its own bodily organs, but only its own sensations, and because it knows that these sensations are not produced by its own agency, it habitually refers to a substance material and divisible what really belongs to a substance spiritual and simple. "Nothing," says D'Alembert, "is more extraordinary, in the operations of mind, than to see it transport its sensations out of itself, and spread them, as it were, over a substance to which they cannot possibly belong."

Malebranche even distinguishes with great acuteness between two classes of these sensations. "In the case of the sensations of *pain* and of *heat*," he says, "it was much more advantageous that we should think we feel them in those parts of the body which are immediately affected by them, than that we should associate them with the external objects by which they are occasioned; because pain and heat having the power to injure our members, we needed to be warned in what place to apply the remedy; whereas *colors*

not being likely, in ordinary cases, to hurt the eye, it would be useless for us to know that they are painted on the retina. On the contrary, as they are useful only so far as they instruct us respecting things external, it was essential that we should be so constituted as to attach them to, or perceive them in, the objects on which they depend." The color of which we are conscious as really seeing it is not spread over the object, or even painted on the retina, but exists solely in the mind, and is as unlike the motion that produces it, as the pain caused by a blow is unlike the stick by which it is inflicted. Hence a person who is stone-blind, if the optic nerve be not destroyed, may, from a sharp concussion on the back of the head, actually *see* a flash of light. * Paradoxical as it may seem, *vision* is actually independent of *light.*

The first step which Malebranche takes to solve this great problem respecting the communication between Mind and Matter is the obvious one, that we do not perceive external objects *in themselves*, but only the ideas or representations of them in our minds. This is the ideal theory, or the doctrine of *mediate* perception through the intervention of ideas, which it is the main object of the Scotch school, of Dr. Reid and Sir W. Hamilton, to disprove. The proper author of it, or rather its originator in modern times, is Malebranche. He argues, that " when we see the sun, the stars, and a multitude of other objects out of ourselves, it is not probable that the mind leaves the body, and goes abroad in the heavens, to contemplate these objects *there.*" And it is a gross, improbable, and unprovable hypothesis to suppose, as the Peripatetics and the Schoolmen did, that *sensible species*, or subtle and half immaterial *simulacra*, are constantly peeling off from every object, and flying everywhere through space, some of which come in contact with our organs of sense, and through these channels are introduced to our minds. No, says Malebranche, this is incredible ; were it so, colors, tastes, sounds, etc., would not be, as they are, mere subjective affections, but true similitudes or copies of what they represent. Then the immediate object of our minds, when we see the sun, for example, is not the sun itself, but something which is intimately united with our souls; and this is what I call *idea.* In perception, it cannot be doubted that the idea of what we perceive is actually present to our minds ; but there need not be anything external which is similar to this idea. I may *think* of a mountain of gold ; such a mountain does not exist, but I am not therefore thinking of *nothing.* There is something there, actually present to thought. So in dreaming, in delirium, ideas are there, as vivid, as

lifelike, as firmly trusted for the moment, as in our sober waking hours.

Whatever is in our mind, however, as a mere modification of that mind, such as sensations, feelings, appetites, joy, sorrow, and the like, these we are conscious of, and immediately perceive without the intervention of ideas; for they are actually present. But external objects are not present; the material *causes* of these sensations are not present. Such objects, such causes, can be known only through ideas. Besides external material objects, there are also *spiritual* objects, the minds of other men, angels, celestial principalities, powers, — God himself. These spiritual objects, says Malebranche, it is probable, may be spiritually discerned, may make themselves known to us in themselves, *per se*, without the intervention of ideas. For though we are taught by experience that we cannot immediately, and of ourselves, make known our thoughts to each other, but must use *words*, or other sensible signs, to which ideas are attached, this proceeds only from the disorders and imperfections of our present state. God has so ordered it for this life only. "But when justice and order shall reign, and we shall be delivered from the captivity of the body, we shall be able to understand each other through the intimate union of spirit with spirit, as now do the angels in heaven."

But I speak here principally of material things, which certainly cannot be so united to our minds as to be directly perceived; since they are extended, and the mind is not, so that there is no relation between them. Then they must be perceived through ideas.

The next question is, whence come these ideas? Not from the objects themselves; this hypothesis of the Schoolmen, as we have seen, is utterly extravagant and improbable. Not from any power which our own minds have of producing them; for then they would be arbitrary, — formed to our liking; whereas they come and go, they fade and brighten, without our will and even contrary to our will. They were not born with us, the soul being stocked with them at its birth; for then they would be always present, and being infinite in number, and bearing countless relations to each other, nothing but confusion and disorder would result, and there would be nothing to determine, at any one moment, which should be irresistibly chief objects of attention. Herein, of course, by rejecting innate ideas, Malebranche dissents from the Cartesian doctrine. Neither does God, by his direct action, produce these ideas in our minds when they first appear there. This is the

Berkeleian hypothesis, and is denied by Malebranche, on the ground that God always acts by the simplest means, and it would be a complicated and operose system, a mere waste of energy, to create the same ideas over and over again, as occasion required, by incessant action on a countless multitude of individual minds.

We come then to the only remaining hypothesis, which is that adopted by Malebranche, that these ideas exist in God, and human minds behold them there, through their union with Him. In truth, what other conception can we have of the omnipresence of God, than that he is present to all things and to all minds, and that his infinite substance is the place or home of spirits, just as boundless space is, in one sense, the place of bodies. All things preëxisted in idea in the Divine mind, before he created them; and all changes which they undergo are produced by his will and power, and are prefigured and preordained in his infinite being. Mind can have intercourse with mind, spirit with spirit, since these are of like nature; but mind cannot have intercourse with matter, for these are totally unlike, — separated from each other by the whole diameter of being. Thus our minds can see in God the works of God, provided he is willing to discover to us *that* in him which represents them. Even in our perception of external objects, then, we are entirely dependent upon God; since we perceive only as much of them as he vouchsafes to make known to us. For, as the Apostle says, we are not sufficient "of ourselves to think anything as of ourselves, but our sufficiency is of God." All the world knows from experience, that when we wish to think of any particular thing, we single it out from a crowd of other beings and things, and then apply our minds to it. Now we could not thus wish to single out and examine this one, if it were not already present to our minds, though in a general and confused manner. All things lie thus confusedly and indistinctly before us; which could not be, if God himself were not present to us, who incloses all beings in the infinitude and simplicity of his essence.

We also are capable of representing to ourselves universal ideas, genera and species, thus beholding all in one. For instance: we think *triangle* in general, including in this idea all possible triangles; and we discern the relations between this and other general ideas. But our senses appear to give us only this or that particular thing, — as this one triangle; and we could not thus discern many in one, we could not recognize abstract and general truths, which are immutable and eternal, as are the truths of geometry, but through the presence of him who can impart to

us glimpses from his omniscience. St. Augustine says, "Truth is increate, immutable, immense, eternal, above all things. It is true in itself; it does not derive its perfection from anything else. It renders created beings more perfect, and all minds naturally seek to know it. Nothing can have all these perfections but God himself. Then the truth is God. When we see immutable and eternal truths, we behold Him." Malebranche adds this qualification, however: "we behold him, not because these truths are God, but because the ideas on which these truths depend are in God."

The second leading feature of the philosophy of Malebranche, the doctrine of Occasional Causes, is only an obvious consequence and extension of the principles already established. Thus far we have considered only the theory of perception, and, through that, of cognition in general. Now we are not merely cognitive, but efficient, free, and, in some sense, creative beings. We are somehow enabled not only to know, but to will and to do, according to his righteous pleasure. As God is the light of all our seeing, so also, says Malebranche, he is the cause of all our doing. I will to raise my arm, and my arm is lifted up. Does my mere will move it? Certainly not; for will is but one phenomenal manifestation of that whose essence is pure thought, and which, as unextended, intangible, and self-involved, cannot act out of itself upon extended and impenetrable substance. Putting forth a volition is only *the occasion* on which my arm rises. Just so, the hands of the clock marking six in the morning may be *the occasion* on which I invariably wake up; but it certainly is not *the cause* of my waking, for there may not be any clock within the range of my senses. Any change in the material universe can result only from the action of its omniscient and omnipotent Creator. As it was created by him alone, so it can be affected, moved, or changed only through him. True, man is free *to will* any action whatsoever; for in this consists his responsibility, the measure of his virtue or his guilt. But the movement or act is the mere consequent of the volition, the contingent effect, which may or may not happen; and whether it does or not, my accountability is the same. All moralists agree, that merit or demerit consists only in the intent — in the will. Homicide is not murder, without malice prepense. But if *I will* to commit murder, then, before God, I am guilty of murder, though the blow should fall short, the dagger should break, or the pistol should miss fire. God sometimes overrules our wicked purposes, so far as the mere outward act is concerned; though far more frequently, under that system of general laws through which the uni-

verse is administered, and which are the expression of infinite wisdom acting always by the simplest means, — through which, also, men are taught what to expect, and thereby to guide their conduct, — through these laws, I say, the criminal purpose is carried out in act, that so its deplorable consequences may stun men into remorse and repentance.

Here, I confess, is the main difference between the philosophy of Spinoza and that of Malebranche; but it is a distinction which is world-wide. Both alike resolve all phenomenal action and change in the physical universe, outward human agency itself included, and all manifestations of that universe, into the mind of God; and so its very substance, so far as we know, into the infinite action and sole efficiency of the Divine Nature. God alone moves and acts, else he would not be God, — would not be infinite or absolute. But the Christian Plato reserves free will — the unfettered purpose and intention — and so the proper individual being, of man, as that with which he was endowed at creation, and which in fact, constitutes *creation;* while the remorseless Jew merges this also into the phantom of infinite substance, and linking all together by blind fate, erects his vision of a blind God-universe, which is one and all.

According to Malebranche, there are three systems of general laws, through which God governs the universe, or rather maintains it in being and activity, creation not being a single act, but a continuous and incessant manifestation of his power. First, there are the general laws of the communication of motion, of which laws the shock or impulse of bodies is the occasional or natural cause. In other words, the impinging of one body upon another marks the occasion or time at which divine power moves them both through a distance which is inversely as their mass. By establishing these laws, God has given to the sun what we call the power of illuminating and warming the earth, to the fire that of burning, and to bodies generally the properties by which they seem to us to act on each other. And it is by obeying these, his own laws, that God performs all which we attribute to secondary causes, or physical law. Secondly, there are the laws of the union of mind and body, the respective modes of which are reciprocally the occasional causes of the changes which take place in them. Thus the opening of the eye, and the impact of the colored rays of light upon the retina, are the occasion on which God raises in my mind the vision of the landscape; and in return, the exercise of my will in a conscious effort determines the moment at which divine power

opens my eyelids or closes my fingers. It is by these laws, says Malebranche, that God unites me with his other works, and according to the common opinion, gives me the power of speaking, walking, feeling, imagining, and the like; and to other bodies the power of affecting my organs of sense. Thirdly, there are the laws of the union of the soul with God, — with the intelligible substance of the universal reason; and of these laws our attention is the occasional cause. When I *will* to reflect, and by patient thought to find out the relations of abstract and universal ideas to each other, God makes known to me, to the extent of his good pleasure, the truth as it is in him. If the inquiry is vain, and I follow error instead of truth, it is because, through failing effort and insufficient attention, I do not sufficiently discriminate clear and distinct from vague and confused ideas.

Form what judgment you may of this theory, which appears so extravagant at the first glance; — accuse it of mysticism, if you will; there can be no doubt, not only that Malebranche accepted it in good faith, and believed it with his whole soul, but that it rested in his mind on a solid basis of evidence and cogent argumentation. If he chose his ground like a religious fanatic, he defended it like a philosopher. Moreover, the latest results of modern physical science, by the confession of the physicists themselves, tend rather to confirm than to weaken it. What mean you, asks Malebranche, by saying that one body can act upon another, and move it? I say it is contradictory to suppose that it does so. The first principle of science is that necessary law of the human mind which declares that every event, every change, must have a cause. Then a body cannot even move itself; and if so, it is a contradiction to suppose that it can make another body move. The essence of body, according to the Cartesians, is impenetrable extension, which is susceptible of a change of place, that is, of a change in its relations of distance from other bodies, or in the relative positions of its several parts. Any other change in it than this is inconceivable. Then it can be moved, but cannot move itself, as there would be nothing to determine whether such motion should be to the right or left, upward or downward. Moreover, according to the Cartesian doctrine already explained, the work of creation being incessant and continuous, or constantly repeated, every body being at every moment created anew here or there, in one place or another, it follows that it is not properly moved thither, but only that it ceases to exist in one locality and is created again in a different one; therefore God, who is its Creator, also necessarily

determines its change of place, or, in other words, moves it. What is called the moving force of bodies being only the will of God creating them anew successively in different localities, they cannot communicate to others a power which they have not in themselves. Now all other corporeal change, such as generation, development, or decay, being reducible to local movement, either of the whole or of its parts, what cannot produce the latter must be equally incapable of bringing about the former. All motion, all change, is thus resolved into the doings of the Infinite One, into a single force omnipresent in the universe and boundless space; and this, directed by absolute wisdom and goodness, keeps up that uniform succession of antecedents and consequents which we denominate physical law.

Now let these arguments pass for what they are worth; I say the conclusions to which they point are virtually accepted, though under different phraseology, by modern physicists, and fairly adopted into the science of our own day. The inertness of matter, its absolute incapacity of producing or initiating change, either in itself or in that with which it is in contact, is now universally admitted. What the chemist analyzes, the naturalist observes, and the mathematician measures and computes, is the phenomenon created or effect produced, *never* the force or power which produces it. "The conclusions forced upon us," says one who speaks with authority on such a subject, the Duke of Argyll, "are these: 1. That the more we know of nature, the more certain it appears that a multiplicity of separate forces does not exist, but that all her forces pass into each other, and are but modifications of some one force, which is the source and centre of the rest. 2. That all of them are governed in their mutual relations by principles of arrangement which are purely mental. 3. That of the ultimate seat of force in any form, we know nothing directly; but the nearest conception we can have of it is derived from our own consciousness of vital power." In other words, all force is one, and we nowhere have any immediate knowledge of it except as originating in volition, directed by intelligence, and manifested in consciousness.

In respect to the charge of Pantheism which has been brought against Malebranche, I cannot do better than to cite his own language translated as literally as possible. "Created extension," he says, "is to the divine immensity, what time is to eternity. All bodies are extended in the immensity of God, as all different times succeed each other in his eternity. God is always all that

he is, without succession of time. He fills all with his substance, without local extension. In his *existence*, there is neither past nor future; all is present, immutable, eternal. In his *substance*, there is neither great nor small; all is simple, equal, infinite. God has created the world; but the will to create it is not past and gone. He will change the world; but the will to change it is not future. The will of God, which has created and will create, is an eternal and immutable act, of which the effects change, without there being any change in God. In a word, God has not been, he will not be, but he is. His existence and his duration (if it is proper to make use of that term) is an undivided whole in eternity, and an undivided whole in every moment that passes in that eternity. Just so, God is not divided, so that a part of him is in heaven, and another part on earth; but he is an unbroken whole in his immensity, and an unbroken whole in all the bodies which are locally extended in his immensity; he is as a whole in all the parts of matter, although these are infinitely divisible. Or, to speak more exactly, God is not so much in the world, as the world is in him, or in his immensity; just as eternity is not so much in time, as time is in eternity."

If you find it hard to rise to these lofty and abstract conceptions, let me remind you of the parallel case of the ubiquitous presence of your own mind, your undivided and indivisible *self*, to your whole body or extended sentient organism. Consciousness assures me that I am an absolute unit, an indivisible whole, without distinction of parts. It is not a part of my real self that feels, another part that thinks, another that remembers, and another that wills. But my whole individual being feels, my whole being thinks, remembers, or wills. It is equally evident that this indivisible Ego of consciousness *is*, or exists, wherever it feels or acts; for, as already explained, action is a mode of being, so that to act where one is not, is equivalent to saying that one can be where he is not, which is a contradiction. Then it follows that the soul, this absolute unit, is *all* in every part of the body; at least, in every part which is sentient. I cannot comprehend *how* this is; but I know from consciousness *that* it is so. Then the relation which I *know* to exist between my indivisible self and my extended body, I can have no difficulty in believing exists also between God and the universe which he has created. As I am not identified with my body, so neither is God identified with the universe. The doctrine of the *anima mundi* must be sharply distinguished from that of Pantheism.

The system of Malebranche is a compound of Cartesianism with Platonism. From the former he borrows, as we have seen, the doctrines of the essential duality of mind and matter, and that the essence of material things is pure extension. But he learned from Plato, that the proper object of the intellect is not the sensible, but the intelligible world, and that its proper function is the vision of eternal and immutable Ideas, the prototypes of all that is real, as these exist in their divine source, the bosom of God. According to Malebranche, what we call the idea of the Infinite in the human soul is the direct immediate vision of God himself. He does not, then, like Descartes, proceed from this idea to the great truth of the being of a God through reasoning from effect to cause; but he holds that there is properly no idea which represents the Infinite One, as he is his own idea; and therefore, in beholding the Infinite, which is constantly present to our minds, since the Finite is only a limitation of it, we have intuitive knowledge, and not merely argumentative proof, that God exists.

Arnauld accused him of imputing imperfections to God, by teaching that we behold all finite and corruptible things in him; and it is in defending himself against this charge that the Platonism of Malebranche becomes manifest. The world inhabited by our intellect, he says, is the intelligible world, the world of ideas. Hence it is not the actual and material man, horse, or tree, but the intelligible man, the intelligible object, the type of the species, which we behold in God. The intellect beholds them there in their essence, without any of the limits and imperfections which belong to all objects within the domain of the senses. What is their essence? It is extension, which, as beheld in God, is pure or intelligible extension; that is, it is the one eternal, immutable, and infinite space, within which are contained all material things, their finite extensions being only such limited and definite portions of it as a finite mind can apprehend. Pure space is the omnipresence of God who fills immensity with his being; and it is the mirror in which we see all things, — the infinite canvas on which are portrayed all particular and sensible forms, as they become visible to us when touched with color and other material qualities on occasion of impressions made upon the senses. All intelligible things, then, are contained in intelligible extension, and are made known to us through the senses, just as all statues are contained in a block of marble whence they are drawn by the chisel of the sculptor. In the knowledge of sensible objects there are always two factors, the idea and the mere feeling or sensation; the

latter is in us, while the idea alone is in God. Thus the sensible, the particular, the contingent, belongs to sensation and is what we see in ourselves. On the contrary, the immutable, the general, the typical form, is the idea, and this is what we behold in God.

CHAPTER VI.

PASCAL.

As the writings of Pascal occupy no prominent place in the development of the system of Descartes, I should not discuss them here, if circumstances had not brought about in our own day a revival of those doctrines in philosophy which unquestionably originated with him, and of which he is still by far the clearest and most eloquent exponent and advocate. It is curious that neither Mr. J. S. Mill nor any of his critics seems to have been aware, that "the Philosophy of the Conditioned" was Sir W. Hamilton's only by adoption, since it is at least two centuries old, having been set forth in all its essential features, even in the theological application which Mr. Mansel has made of it, by Pascal. Hamilton could not have been ignorant of this fact, since Pascal was one of his favorite authors, and he frequently borrows from the "Pensées" arguments and illustrations either of the theory itself, or which stand in close juxtaposition with passages in which the theory is explicitly set forth. He probably regarded his obligations to that marvellous child of genius as so obvious as not to need mention. The fact is of some importance, since Mr. Mill openly attributes the paralogisms into which he thinks Hamilton was betrayed, in attempting to prove that the Infinite and the Infinitely Divisible are both inconceivable, to his ignorance of mathematics. Now these "puzzles concerning infinity" are, to a considerable extent, directly borrowed from Pascal, who was certainly the greatest mathematical genius of his age.

But before we can fairly estimate this Philosophy of the Conditioned, we must glance at the character and circumstances of the man by whom it was first thought out and enounced. Born in 1623, and dying at the early age of thirty-nine years, Pascal was rather the contemporary and rival, than the follower, of Descartes. None of the writings of Spinoza, Malebranche, or Leibnitz had appeared at the time of his death. Only Arnauld and Descartes could have had any influence over the growth of his mind; and

these not by imparting doctrines, but by exciting controversy and stimulating thought. After running a brilliant career in mathematics, and physical science, making some of the most important discoveries of his century at an age when most men have not completed their preliminary studies, Pascal suddenly abandoned the pursuits in which he had gained so much renown, renounced his youthful ambition, and devoted his whole soul to the contemplation of God and a future life. He became an ascetic and an enthusiast; I will not say a fanatic, as his cruelties were lavished only on himself. But few years remained to him, and these were sorely crossed by bodily pain and disease; but during this short period, his achievements in defence of persecuted truth and religious philosophy were destined to surpass in splendor his early contributions to human science. Apart from his merits as a thinker, his writings contributed to the fixation of the French language, and are still unrivalled for vigor, terseness, and eloquence. As a philosopher he is most naturally compared with Malebranche, though they do not seem to have had any personal intercourse. Both were men of ardent minds, endowed with strong imagination and lively wit, severe, sarcastic, and fearless; distrustful of human science beyond the bounds of mathematics; disposed to underrate what man has accomplished and the powers of his understanding; and carrying a fervid piety so far as to accept even with gratitude some of the most appalling conclusions which theologians have ever evolved from Scripture. But Malebranche was more serene and expansive in the contemplation of religious truth, and less overwhelmed with awe in the presence of God, and in view of the destiny of man; he has not so much vigor, but more copiousness and variety of thought. Pascal has more passionate energy in working out the truth, and greater vehemence in inculcating it. He rises almost to the grandeur of a Hebrew prophet in denouncing the deceptions and wickedness of man's heart and the vain pretensions of his understanding. He seems to triumph in exposing the weakness and imperfection of human nature, and the vanity of human pursuits. But it is not with the mocking spirit of a satirist that he dilates upon the fallen and wretched condition of our race. In his eyes, man is weak and degraded, but not contemptible; his view is fixed as much upon the heights from which he has fallen, as upon the abyss into which he is plunged. His magnificent lamentations are uttered in the spirit of Jeremiah weeping over the sins of his nation, and pointing out the ruin with which it is menaced. He seeks to humble only that he may exalt; to point out the frailty and wretch-

edness of man's condition in this world, only that his attention may be diverted from it, and turned upon the grandeur of the Last Judgment and the unutterable splendors of the life to come.

"Man is so great," he says, "that his grandeur appears even from the knowledge that he has of his own misery. A tree does not know that it is wretched. True, it is sad to know that we are miserable; but it is also a mark of greatness to be aware of this misery. Thus all the wretchedness of man proves his nobleness. It is the unhappiness of a great lord, the misery of a dethroned king." The misery of our present condition is aggravated by the consciousness that we have fallen from a state of innocence and peace. Like the poet, Pascal finds there is no greater grief than the recollection of happiness formerly enjoyed. "Who, but a discrowned monarch," he asks, "is grieved that he does not possess a throne? Who thinks himself unhappy, because he has but one mouth? And who is not unhappy, if he has but one eye? No one ever thought of sorrowing, because he has not three eyes; but he is inconsolable, if he has but one."

With this striking revelation of our causes of discontent, contrast the following sublime reflection upon the grandeur of our being, considered as a thinking soul. "Man is the feeblest branch of nature; but he is a branch that thinks. It needs not that the whole universe should rise in arms to crush him. A vapor, a drop of water, is enough to slay him. But though the universe should crush him, he would still be nobler than that which causes his death; for he knows that he is dying; and the universe knows nothing of its power over him." It is in view of contrarieties like these, that Pascal exclaims, "What an enigma, then, is man! What a strange, chaotic, and contradictory being! Judge of all things — feeble earthworm — depositary of the truth — mass of uncertainty — glory and butt of the universe; — if he boasts himself, I abase him; if he humbles himself, I glory in him; and I always contradict him, till he comprehends that he is an incomprehensible monster."

Pope has versified this thought so accurately, that I suspect he wrote with Pascal open before him.

> "Chaos of thought and passion all confused,
> Still by himself abused, or disabused;
> In doubt his mind or body to prefer,
> Born but to die, and reasoning but to err;
> Created half to rise and half to fall,
> Great lord of all things, yet a prey to all;
> Sole judge of truth, in endless error hurled,
> The glory, jest, and riddle of the world."

"Our imagination," says Pascal, "so magnifies the present hour, through constantly spending thought upon it, and so belittles eternity, through not thinking about it at all, that we make an eternity of nothing, and a nothing of eternity; and all this has its roots so deeply implanted in us, that reason, though put on its guard, cannot protect us against the double error."

"I know not who put me into the world, nor what the world is, nor what I myself am. I am in a terrible ignorance of all things. I know not what my body is, what my senses are, what my soul is, or even what is that very part of me which thinks what I am now saying, and which knows itself just as little as anything else. I see these frightful immensities of the universe which enclose me, and I find myself tied down to a little corner of this vast extension, without knowing why I am placed on this spot rather than on that, nor why the little time during which it is permitted me to live is assigned to one point rather than another of the whole eternity which preceded me, or of the whole eternity which will follow me. I see only infinities in all directions, which envelope me like an atom, and like a shadow which endures only for a moment, and will never return. All that I know is, that I must soon die; but what I know the least of is that very death which I cannot avoid." "The eternal silence of these infinite spaces frightens me."

We can now comprehend the source, the materials, and the purpose of Pascal's philosophy. His gloomy but grand conception of the present state of the human soul proceeds from his acceptance of the Augustinian dogma of the fall of man, through the sin of Adam, from innocence and happiness to depravity and ruin, and his consequent helplessness and need of a Saviour. In his eyes, man is a ruined archangel. His conviction of sin, his consciousness of present misery, is aggravated by a dim recollection of the purity and bliss which he has forfeited. His condition is irremediable; he cannot make even an effort to save himself, except through the prevenient grace of God. This inability is stamped alike upon his understanding and his conscience, — upon the contradictions in which he is involved when he searches after truth, and the depravity of his own heart which drags him downwards when he fain would rise. The strongest proof of Christianity is, that it reveals man to himself; that it explains the enigmas of his being, the mixture of good and evil in his present lot, and points out the origin and the only cure of his unhappiness. Jansenism was the development within the Romish church of the

same system as Calvinism among Protestants. Both are expositions of the metaphysical theory which the fervid genius of the great African bishop, Augustine, constructed out of the writings of St. Paul. This system has always had a strange fascination for minds of great dialectical ability, united with a meditative disposition and intense convictions of religious truth. It has been worked out by some of the most distinguished metaphysicians of the Old and the New World. Since the great Port Royalists, Arnauld, Nicole, and Pascal, far the ablest teacher of this philosophy is our own Jonathan Edwards. The system had no natural home among French Catholics, and was soon persecuted out of existence by the bitter opposition of the Jesuits. But in Switzerland, Scotland, and New England, Calvinism has found firm foothold among the people, and either as its cause or its consequence, we find a strong taste and capacity for metaphysical studies.

Pascal's philosophy exists only in a fragmentary state, — a collection of detached thoughts and aphorisms, scribbled by him upon loose scraps of paper during the intervals of sickness and great suffering which clouded the last three years of his life. These were merely shuffled together without arrangement at the time of his death, though his editors have endeavored to distribute them into such order as to preserve some connection of thought. I bring together, translating as literally as possible, those of them which present a distinct and forcible outline of that "Philosophy of the Conditioned," as it is usually called, which now passes under the name of Sir William Hamilton.

"It is a weakness natural to man," argues Pascal, "to believe that he possesses the truth directly; hence it happens, that he is always disposed to deny every thing which is incomprehensible to him; whereas, in fact, he is naturally conversant only with falsehood, and he ought to accept as true only those propositions of which the contradictory seems to be false. This is why we ought always, when a proposition is inconceivable, to suspend our judgment concerning it, and not to deny it on this account, but examine its contradictory; and if we find this is necessarily false, we may boldly affirm the former one, incomprehensible as it is. Let us apply this rule to our subject."

"There is no mathematician who does not believe that space is infinitely divisible; and yet there is no one who comprehends an infinite division. We comprehend perfectly well, that by dividing a given extension ever so many times, we can never arrive at a portion of it which is indivisible, — that is, which has no extension.

For what is more absurd than to maintain that, when a portion of space is divided, its two halves should remain indivisible and without any extension, so that these two nothings of extension, when taken together, should constitute an extension? For I would ask those who think they have this idea, whether they conceive clearly that the two indivisibles touch each other; if they touch throughout, then they constitute only one and the same thing, and yet the two together are indivisible; if not throughout, then they touch only in part; then they have parts; then they are not indivisible."

"Let them confess, then, as in truth they do when they are pressed, that *their* proposition [that space is not infinitely divisible], is just as inconceivable as *the other* [that space is infinitely divisible]; and let them acknowledge that it is not by our capacity of conceiving things, that we ought to judge of their truth; since the two contradictories being both inconceivable, it is still absolutely certain that one of them is true."

In like manner, he argues: —

"However great a number may be, we may always conceive a greater one, and then one which is greater than this last, and so on to infinity, without ever arriving at one which cannot be any farther augmented. And, on the contrary, however small a number may be, as the hundredth or ten thousandth part, we may always conceive a smaller one, and so on to infinity, without arriving at zero or nothing."

"In a word, for any movement, any number, any space, and any time whatsoever, there is always a greater and a less; so that they are all sustained between nothing and infinity, being always *infinitely* remote from these extremes."

"All these truths cannot be demonstrated; and yet they are the very foundations and principles of mathematics. But as the reason which makes them incapable of demonstration is not their obscurity, but their extreme evidence, this want of proof is not a fault, but rather a perfection."

"Those who see clearly these truths, will be able to admire the grandeur and the power of nature, in this double infinity which surrounds us on all hands, and learn from this marvellous consideration to know themselves, by regarding themselves as placed between an infinity and a nothing of extension, between an infinity and a nothing of number, between an infinity and a nothing of motion, between an infinity and a nothing of time; and thereby one may learn to estimate himself at his true value, and form reflections which are worth more even than all the rest of mathematics."

"For, in fine, what is man in nature? A nothing in regard to the infinite, an all in regard to nothing, a middle term betwixt nothing and all. Infinitely removed from comprehending the extremes, the end of things and their beginning are, for him, veiled forever in impenetrable secrecy; and he is equally incapable of seeing the nothingness whence he was drawn, and the infinite in which he is ingulfed."

"Unity added to infinity does not at all augment it, any more than a foot increases an infinite measure. The finite is annihilated in presence of the infinite, and becomes a pure nothing. So is it with our spirit before God; so with our justice before the Divine justice. There is not so great a disproportion between unity and infinity, as between our justice and that of God."

"We know *that* there is an infinite, and we are ignorant of its nature, since we know it is not true that numbers are finite; then we know that there is an infinite in number, but we know not *what* it is. It is neither odd nor even, for adding unity to it does not change its nature. And yet it is a number, and every number is either odd or even."

"Thus we may well know *that* there is a God, without knowing *what* he is."

"Think you it is impossible that God should be infinite, and yet without parts? But I will show you a thing which is both infinite and indivisible; it is a point moving in all directions with an infinite swiftness; for it is in all places, and it is all in each place."

In these eloquent fragments, the Law of the Conditioned is even more correctly enunciated than it is by Hamilton. In every form of existence which is quantitatively conceived, whether it be space, time, number, or motion, all that is positively thinkable is a determinate mean between *these* two extremes, — the infinitely great and the infinitely small, — both of which are inconceivable to thought, and yet one must be true, because its contradictory is equally inconceivable. And this mode of reasoning, far from being novel or doubtful, is the familiar *reductio ad absurdum* of the mathematicians, whereby a proposition that is not directly provable is still demonstrated by showing that its contradictory must be false. But everywhere in his writings, except perhaps in the Appendix to his "Discussions," Hamilton partially misstates this truth, by affirming that the two extremes, between which all positive thought lies, are contradictories *of each other*, instead of each having a contradictory of its own; and hence, that only one of these

two extremes is true or real, the other being necessarily false. To this it may be very briefly answered, that the infinitely great is not the contradictory of the infinitely small; and even if it were, there would not be any "mean" between them, any neutral ground to be occupied by what is positive in human thought; since the very nature of the mathematician's *reductio ad absurdum*, or the logician's law of Excluded Middle, is the exclusion of any mean between two contradictories. The thing is so, or is not so; there is no mean, no third proposition, possible. And to say of the two extremes, the infinitely great and the infinitely small, that only one of them is true, and the other false, is the very opposite of the doctrine which Hamilton has in view. Both are true, but both are inconceivable; we know *that* this is so, but we know not *how* it is so.

Of course, this system is destructive of empiricism. All the space of which we have had experience, either through the senses or by the imagination, is finite or limited. But beyond these limits, beyond this finiteness, we have certain knowledge of the existence of an infinite space, of which we have had no experience. Pass in imagination to the outer bounds of the stellar universe, and there ask yourself, if you are not absolutely certain that you could thrust out your arm into the void space that lies beyond. Place the boundary where we may in thought, we are still sure that this experiment might be repeated. Then there is no boundary, no end, to space. Obliged to admit this, Mr. Mill and other empiricists still strove to escape from Pascal's dilemma, by denying that this infinite space is inconceivable to thought. Mill affirmed that our conception of it is both "real and perfectly definite;" and that "we possess it as completely as we possess any of our clearest conceptions, and can avail ourselves of it as well for ulterior mental operations." But his doctrine, as thus explained, involves him in a worse difficulty than that which he strives to shun. The want of experience, he tells us, is all that prevents us from conceiving space *as finite*. Ought not, then, a corresponding want of experience to prevent us from conceiving space *as infinite?* Or did Mr. Mill intend to maintain the not very intelligible proposition, that finite man has had experience of infinite space *as infinite?*

Mr. Mill's farther attempt to characterize this "perfectly definite" conception, by saying that it is "greater than any finite space," simply confounds the infinite with the indefinite: for the question immediately arises, *how much greater?* If you cannot tell how

much greater, then it is simply the indefinite; if greater only by some finite magnitude, the answer is not true; if infinitely greater, the answer is a silly truism, for it is summed up in this equation: Infinite Space $= x +$ Infinite Space.

The mathematician's "infinite" and "infinitesimal" are merely this indefinitely great and indefinitely small; that is, quantities which may be made as great or as small as we please, without affecting the use which we are to make of them. Thus defined, or rather thus left indefinite, the mathematician has a perfect right to speak of an "infinitesimal" of the second or third power, — expressions which Berkeley very properly ridiculed as absurd, when applied to the "infinitely small" strictly so called, which is simply the mathematical infinitesimal raised to an *infinite* power.

It is obvious that all which has now been said is just as applicable to time, as it is to space. Go back in imagination to the beginning even of that long roll of ages in which the geologists endeavor to express their ideas of the history of the world's crust; and you are still sure that there is a void time beyond this vast lapse of centuries, — a length of time in comparison with which even geological chronology shrinks to an indivisible moment, or is reduced to nothingness. In reference also to infinite time, as well as to infinite space, the mind does not merely, through exhaustion, fail to see an end of it, but is sure that it has no end, that a termination of it is impossible. In other words, it is not by induction, or after the failure of repeated efforts, that we have gradually satisfied ourselves that a limit is not to be found; but immediately, — as well before making the trial as after its failure, — as well when we have passed over one mile as after we have in thought accomplished a thousand, the conviction comes to us, that there is no limit, that the line stretches out to infinity. Again, "Time and Space contain in their ample bosom all finite existences, and are not themselves contained in any or all of these existences. All created things are situated in Space, and also have their own moment in Time; but Time is everywhere, and Space is as old as Time. Each of them exists in its entirety in every part of the other."

The practical lesson to be derived from this Philosophy of the Conditioned is thus well expressed by Hamilton: "that the capacity of thought is not to be constituted into the measure of existence;" we know that there are realities all around us, which the human mind cannot comprehend or conceive. We stand, as has been well said, at the confluence of three immensities and two

eternities. Above and below us, and on either hand, stretches the infinitude of space; before and after the present moment reaches the infinitude of time. Thus encompassed by the inconceivable, compelled to assert its reality in the very act of acknowledging that it goes beyond the grasp both of the imagination and the intellect, we are taught at once a lesson of humility and of faith. In the mere consciousness of our inability to conceive aught beyond the relative and the finite, we are inspired with the belief in the existence of something unconditioned, beyond the sphere of all imaginable reality. We know that He is, though we comprehend Him not; for who can by searching find out God, or who can understand the Almighty to perfection. I do not say, with Descartes and Malebranche, that these considerations, these eternal and immutable truths, *prove* the being of a God; but they suggest, they bring home to the mind, his necessary and omnipresent existence with a force which mere argument could only weaken.

The lesson of humility which is taught by these considerations is enforced by Pascal with marvellous richness of illustration. "This condition of occupying intermediate ground," he says, "holds true of all our faculties. Our senses take cognizance of nothing that is extreme. Too much noise deafens us; too much light dazzles us; too great distance and too near proximity impede vision; too great length and too much brevity make discourse obscure; too much pleasure wearies, and harmony too long continued becomes monotonous and unpleasant. Excessive qualities are hostile to us, and not subject to the senses." Sounds of too high or too low a pitch become inaudible. "To us, extreme things are as if they were not, or as if we were not in respect to them. This is our true condition. This is what keeps our knowledge within fixed limits, and makes us alike incapable of knowing every thing, and of being totally ignorant of every thing. This is our natural condition, and yet it is the most opposite to our inclination. We burn with desire to know every thing thoroughly, and to build a tower which shall rise even to the infinite. But our whole edifice cracks, and the earth opens beneath us even to the abyss."

"Instead of perceiving things as they really are, we stain with the qualities of our own compound being all the simple and uniform things that are presented to us. Who would not believe, on seeing that we reduce all things to body and spirit, that the union of these two would be of all things the most comprehensible? And yet it is the very thing which is most difficult to be understood.

Man is to himself the most marvellous object in nature; for he cannot conceive what *body* is, still less what is *spirit*, and less than all, how body can be united to spirit. This is the height of his difficulties, and yet it is his proper being."

This, then, is the conclusion of the whole matter. "The sciences have two extremities, which come together and end in the same thing. The first is the pure natural ignorance, in which all men find themselves at birth. The other extremity is the conclusion which all great minds come to, when, having run through all that man can know, they find that they know nothing, and meet in the same ignorance whence they set out. But it is a learned ignorance, which has become conscious of itself."

Sir William Hamilton expresses the same result so nearly in the same words, that we must suppose that he had the "Pensées" opened before him at this passage. "There are," he says, "two sorts of ignorance: we philosophize to escape ignorance, and the consummation of our philosophy is ignorance. We start from the one, we repose in the other. They are the goals from which, and to which, we tend; and the pursuit of knowledge is but a course between two ignorances, as human life itself is only a wayfaring from grave to grave. If, as living creatures,

> 'we are such stuff
> As dreams are made of, and our little life
> Is rounded with a sleep;'

so, as cognizant intelligences, our dream of knowledge is a little light rounded with a darkness. Science is a drop, nescience is the ocean in which that drop is whelmed. The highest reach of human science is, indeed, the scientific recognition of human ignorance: 'Qui nescit ignorare, ignorat scire.' This 'learned ignorance' is the rational conviction by the human mind of its inability to transcend certain limits. It is the knowledge of ourselves, the science of man."

To prevent this doctrine of the limitations of human knowledge, however, from being pushed to an injurious excess, it behooves us to remember that the unthinkable is not necessarily the non-existent. There may be a direct presentation of it to consciousness, and even to the senses, while we are wholly unable to conceive how it originated, or what is its inmost nature or essence, or even what are its relations to the other facts of consciousness. We may cognize its existence as a reality unquestionably present to our minds, even when we cannot think its particular mode of existence, or classify it with any other forms of being. Even as a phenomenon,

or mere appearance, there must be something behind it; for, as Kant remarked, if nothing is, nothing would appear. Thus, Time is certainly a mode or form of consciousness, and we apprehend it even as necessarily existent, being unable to imagine its non-existence; though Time as such, irrespective of the events happening in it, is absolutely unthinkable. It is unique and *sui generis;* we can neither think it as substance, nor as a nonentity or the absence of substance. In like manner, Self, the indivisible Ego of consciousness, always identical with itself in its successive manifestations, is quite unthinkable in its essence or inmost nature, and also in its relations either to the body, or to the other modes of consciousness; yet this inconceivableness does not prevent our conviction of its reality from being to every one a type of what is most real and positive, and the strongest expression of certitude of which the human mind is capable.

Another instance is thus clearly set forth by Mr. Mansel: "We cannot conceive *creation* at all, either as a springing of nothing into something, or as an evolution of the relative from the absolute; for the simple reason that the first terms of both hypotheses — nothing and the absolute — are equally beyond the reach of human conception. But while creation *as a process in the act of being accomplished* is equally inconceivable on every hypothesis, creation *as a result already completed* presents no insurmountable difficulty to human thought, if we consent to abandon the attempt to apprehend the absolute. There is no difficulty in conceiving that the amount of existence in the universe may, at one time, be represented by A, and at another, by A + B; though we are equally unable to conceive how B can come out of nothing, and how A, or any part of A, can become B while A is undiminished." Indeed, in the familiar phenomenon of birth, creation as thus understood is constantly taking place before our eyes. In some manner inscrutable and inconceivable by us, what was a single or individual life, represented by an indivisible consciousness, suddenly becomes two independent lives, each attended by its separate consciousness. In this way, the birth of every human being is the addition of a unit to the sum of existence.

CHAPTER VII.

Leibnitz.

With the single exception of Aristotle, I suppose that Leibnitz was the most comprehensive genius that ever lived. Other men have been as industrious, and have become as learned, as he; they have also aimed at original speculation on as great a variety of topics. But they have sacrificed success in any one department to this dream of universal empire; they might have accomplished more, had they attempted less. Leibnitz alone, in modern times, attempted every thing, and left his mark on all that he undertook. Even at the present day, there is hardly a science, hardly a field for study, research, or speculation, which does not bear the impress of his labors, or the history of which could be fully written without frequent mention of his name. "As some of the ancient charioteers," said Fontenelle, "could guide eight horses yoked side by side, so Leibnitz drove forward all the sciences abreast." Historian, jurisprudent, philologist, mathematician, physicist, theologian, moralist, and philosopher, even those who began by censuring the multiplicity of his pursuits, after reviewing what he actually accomplished, the new problems that he started, and the many pregnant hints of future discoveries for which science is indebted to him, have been compelled at last to doubt, as Dugald Stewart says, "whether he could have accelerated the advancement of knowledge by the concentration of his studies more than he has actually done by the universality of his aims; and whether he does not afford one of the few instances to which the words of the poet may literally be applied: *si non errasset, fecerat ille minus.*" He shares equally with Sir Isaac Newton the glory of inventing the Differential and Integral Calculus; his doctrine, that the force is not simply as the velocity, but as the square of the velocity, after raising a controversy that lasted over a century after his time, is now admitted as a first principle in science; his announcement of the Law of Continuity, that nature never proceeds *per saltum*, and its corollary, of the existence of a scale of beings vary-

ing by imperceptible gradations, accepted almost at once in a large department of research, was adopted as late as 1866 by Mr. W. R. Grove, the president of the British Association, as the latest and broadest generalization of all the science of our own day; the doctrines, first proclaimed by him, of the Sameness of Indiscernibles, and of the need of a Sufficient Reason for all things, are among the most comprehensive and fruitful principles ever introduced into the field of purely speculative philosophy; his theory of Monads, in at least one of its many phases, is probably admitted by the most scientific minds of the present time; his system of Optimism, versified by Pope and ridiculed by Bayle and Voltaire, has not yet ceased to be eagerly discussed in the schools of systematic ethics and theology; and his purely metaphysical principles, of Preëstablished Harmony and the criteria of Innate Ideas, created the modern philosophy of Germany, and, through that, are even now largely affecting the course of thought in cultivated minds throughout Europe and America. He has been accused, and not without reason, of a not uncommon weakness of great minds, the pride of conquering difficulties; and a consciousness of this fault appears in his own remark, that, to him, "all difficult things were easy, and all easy things difficult."

Godfrey William Leibnitz was born in Leipsic, on the 21st of June, 1646, and died in Hanover, November 14, 1716. His father, who was Professor of Ethics in the University, died when the boy was only six years old, and the care of his early education devolved on his mother, an accomplished and excellent woman, the daughter of a distinguished jurisprudent. Leibnitz showed great precocity of talent and eagerness for learning; and as he inherited from his father a considerable library of well-chosen works, he became a devourer of books, and the study of the Latin and Greek classics formed the amusement rather than the task of his boyhood. He acquired a singular facility in the composition of Latin verses, and he boasts in one of his letters that, when he was only thirteen years of age, he wrote three hundred hexameter lines in one day, without admitting the elision of a single syllable. He also occasionally wrote verses both in German and in French; but his native tongue does not appear to have been a favorite with him, for with one or two trifling exceptions, he wrote all his philosophical works either in French or Latin. At the University of Leipsic, where he graduated at an early age, he studied philosophy under Thomasius, and mathematics under Professor Kühn, paying much attention also to philology, history, and jurisprudence. No

one ever verified more completely the often cited remark of D'Aguesseau, by seeking his amusement rather in a change of objects, than in a suspension of mental labor. Before he had been two years out of college, he published four elaborate essays, one of which was on a new method of studying jurisprudence, and another was a treatise against atheism. Baron Boineburg, who was high in office under the Elector of Mayence, conceived a favorable opinion of his character and abilities, and held out to him the hope of employment in affairs of state. Under encouragement received from this minister, Leibnitz published at Frankfort, in 1670, his first considerable philosophical work, an edition of Nizolius "De veris Principiis et vera Ratione philosophandi," with supplementary essays and notes. Two years afterwards, he went to Paris, on a sort of diplomatic mission from Boineburg, to induce Louis XIV. to make an expedition against Egypt, and thereby counteract the menacing attitude of the Turkish power in Europe, instead of turning his arms against Germany, which would be to coöperate with the Turks. The negotiation failed, but the history of it is curious, when considered as an anticipation of the project which was brought nearly to a successful result more than a century afterwards by Napoleon. Leibnitz remained over four years in Paris, and also visited London, making the acquaintance of the most eminent men of letters and science in the two cities, among whom were Arnauld, Huygheus, Oldenburg, Boyle, and two distinguished mathematicians, Collins and Tschirnhausen. Intercourse with these men did much to shape and develop his subsequent speculations and endeavors.

The difficulty is great of rendering any connected account of the opinions of Leibnitz; for he published no one work of any length or method, giving a consecutive view of his system as a whole; probably from a consciousness that all his doctrines could not be forced into complete harmony with each other. His writings consist of a huge mass of correspondence with nearly all the literary and scientific men in Europe; of short papers communicated to philosophical societies; and of a few occasional and hasty publications of greater length, which are so carelessly executed that they might be termed ephemeral, were it not for the importance and novelty of some of the theories therein set forth. After his opinions were matured, he prepared only two treatises of considerable length, on purely philosophical subjects, apart from his contributions to mathematical and physical science. These are his "Theodicy, or a Discourse on the Conformity of Faith and Reason,

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and Essays on the Goodness of God, Human Free Will, and the Origin of Evil," — a work written in answer to Bayle, and containing in outline his system of Optimism, and his doctrines of the Sameness of Indiscernibles and the need of a Sufficient Reason; and his *Nouveaux Essais sur l' Entendement Humain*, a work which was not published till about half a century after the death of its author. It is a criticism on Locke, setting forth the writer's theory of Innate Ideas, with incidental mention of his other metaphysical speculations. In his busy life, Leibnitz had no leisure thoroughly to digest his opinions into method and system. He was by no means a mere student of science and philosophy; he was also a diplomatist, a statesman with all the cares of office, a courtier, and a man of the world; he stood high in the favor of princes, and was connected with some of the most important negotiations of his time. In a large sense, his career belongs to the history of Europe.

The logic and method of Leibnitz differ considerably from those of Descartes, though both are Rationalists, rejecting empiricism, as affording no sure foundation for science; in other words, they place the intuitions of reason and the deductive conclusions of the understanding far above the generalizations of experience. Facts obtained by observation may be used to verify, but never to originate or supersede, the primary truths of philosophy and science, which can be evolved only by meditation and the rigorous processes of logic; that is to say, mathematical reasoning affords the only type of certainty and precision.

Leibnitz begins an exposition of his method by saying that ideas are clear or obscure, according as they do, or do not, enable us to distinguish objects *as wholes* from each other; they are distinct or confused, according as we can, or cannot, discern the marks or attributes whereby one object is distinguished from another; they are adequate or inadequate, in so far as we have, or have not, a clear and distinct notion of each of these marks or attributes, as well as of the substances in which they inhere. Now the senses often give us *clear* notions, less frequently *distinct* ones, and never *adequate* ideas of the objects perceived. Thus, even a child clearly distinguishes a circle from a triangle, each figure being roughly considered *as a whole;* but he has no distinct notion of the many geometrical properties or attributes, which are peculiar to each of these forms; and still less can he adequately conceive all the consequences, which the mathematician perceives to flow necessarily from each of these properties or attributes. Only the intuitions of pure

reason, guided or restricted by the dialectical processes of the understanding, can attain to perfectly clear, distinct, and adequate ideas; these alone are perfect, and never can be derived from sense. *Number*, in the abstract, is perhaps the only instance that can be given of an idea perfect and pure. A given object, such as a piece of iron, may have been observed by the senses for an indefinite time, and at last, only accident makes us aware that it is magnetic. We can never be sure that it does not possess many other, as yet unknown, properties; and still less can we trace all the consequences that might follow from its attributes, so far even as already known. An infinitude of experiments would have to be tried before these could all be determined. Sensible ideas, as they are never adequate, admit only of a Nominal definition, which does not express their essence at all, and enumerates but few of their marks. A Real definition is possible only of adequate and intuitive ideas, such as the geometer frames of his various figures, and which, through establishing the compatibility with each other of the various elements of the idea, gives us to know *a priori*, or antecedently to experience, the possibility of the idea as a whole. Thus, the geometer knows at once, by intuition, that a triangle, or a three-sided figure enclosing space, is a possible conception; and that a bilinear, or two-sided, figure, thus enclosing space, is impossible.

According to Leibnitz, again, an idea is true when it is possible, and false when it implies a contradiction, as in the case of the two-sided figure. Pure intuition of possible premises, and the resolution of complex ideas into simple or irreducible notions, form the only source of all absolute and demonstrative truth. In other words, deductive syllogistic reasoning from conceivable premises — that is to say, from premises conceived clearly, distinctly, and adequately — is the art of infallibility, that universal mathematics, which Descartes dreamed of, the syllogistic machine, which is the only road to necessary truth. Syllogism, in fact, is the only form of necessary reasoning. Experience, the evidence of the senses, can lead only to contingent results, to merely probable conclusions.

But though logic, beginning with intuition and governed in its course by the necessary laws of thought, is sufficient for the discovery of the true, it cannot, in itself alone, conduct us to the real. The true is the possible, or the conceivable; the real is the actual. The former, the true, is what God eternally thinks; the latter, the real, is the product not so much of his thought, as of his will; it is what he has created, the world which he has chosen,

out of all possible worlds, to bring into existence by the decree of his omnipotent will. How then can the human mind, among all the possible worlds which it can conceive, detect that one which God has made actual, or has reduced from a possibility to a fact? By reason again; by the light of an *a priori* principle, which dominates, enlightens, and regulates experience;— the principle that nothing exists, or can exist, without a sufficient reason for its existence. Now the only conceivable sufficient reason why this universe which we inhabit, and of which we are a part, has been created by an infinitely wise and good God, is, that it is the best of all possible worlds. An infinitely wise and good being could choose only the best. And what is the best? Evidently that world in which there is the utmost possible order, harmony, perfection, and beauty. This world in which we live must unite all these perfections, whether our poor finite understandings can detect and be convinced of them, or not.

This is Leibnitz's famous system of Optimism. It is a bold attempt to sound to the very bottom the deep and dark problem of the origin of evil, to demonstrate the conformity of faith with reason, and to reconcile the ways of God to man. Pope sums it all up in six lines:—

> "All nature is but art unknown to thee;
> All chance, direction, which thou canst not see;
> All discord, harmony not understood;
> All partial evil, universal good;
> And, spite of pride, in erring reason's spite,
> One truth is clear, whatever is is right."

Pope, as is commonly supposed, got his philosophy from Bolingbroke; and if so, Bolingbroke certainly took it from Leibnitz. Read the "Essay on Man" over again, and you will find the whole system expounded in it to be this doctrine of Optimism, founded on the Principle of Sufficient Reason, and the theory of a scale of beings passing into each other by imperceptible gradations, and so bound together as one whole, deduced from the Law of Continuity. If you would have a bitter, mocking satire on it, containing also about all the facts and arguments that can be urged against it, read Voltaire's "Candide." Bayle, the contemporary of Leibnitz, and the Voltaire of the seventeenth century, argued against and ridiculed it from the outset; and the "Theodicy" of Leibnitz, occasional, like most of his other publications, is his reply to Bayle. Crousaz, the Swiss philosopher, attacked Pope's "Essay on Man," as an indirect mode of attacking Leibnitz; Warburton in England, and Vattel in Switzerland, replied to Crousaz and defended Pope.

Leibnitz is careful to explain that "the world," as here understood, does not mean merely the total arrangement of objects existing and events taking place *at any one time*, but includes also the inevitable antecedents and consequences of any such arrangement, considered as extending throughout all time, or throughout the whole history of the universe. "What I mean by *world*," he says, "is *the whole succession*, as well as collection, of all existing things, so that it may not be said that there might be many worlds in different times and places; for it would be necessary to take these all together, in order to constitute "a world," or, if you will, a universe. And even if all times and all places were filled, it would still be true that they might have been filled in an infinite number of ways; and thus, there would still be an infinite number of possible worlds, of which God must have chosen the best, since otherwise perfect wisdom would have acted without a Sufficient Reason." What is truly best must be best on the whole, and in the long run, full regard being had to all the connected circumstances, both in the past and the future, which are indissolubly bound up with it by an absolute or metaphysical necessity.

"Some may object by saying that there might have been a world without the sin and suffering which are apparent now and here. Granted; but I deny that such would have been a better world. For in every possible world, all things are connected together; the universe, whatever it may be, is all of a piece, like an ocean; the least movement extends its effect to any distance, though the effect becomes less in proportion to its distance. God has regulated every thing there beforehand, once for all, having foreseen the prayers, the good and bad actions, and all the rest; so that every thing has contributed *ideally*, before its existence, to the resolution which has been formed concerning the existence of all things. Thus, nothing could be changed in the universe, any more than in a given number, without changing its essence by destroying its numerical identity. Thus, if the least evil which happens in the world should be taken away, it would no longer be *this* world; which, all counted, all taken together, has been found the best possible world by the Deity who has chosen it.

"True, we can imagine possible worlds without sin and without suffering, and make romances, Utopias, Severambias, of them; but these same worlds would still be very inferior in good to ours. I cannot make you see this in detail, for how can I know and represent infinite worlds, and compare them with each other? But you ought to judge, as I do, that it is so, *from the effect*, because God

has chosen this world such as it is. Moreover, we know that an evil often produces a good which could not have happened without this evil. Even two evils have often made a great good.

"'Et si fata volunt, bina venena juvant.'

So two liquids sometimes produce a solid, and two cold and opaque bodies may make a fire. A general sometimes makes a happy blunder, which wins a great battle; and in the Romish church, on Easter eve, don't they sing, —

"'O certe necessarium Adæ peccatum,
Quod Christi morte deletum est?
O felix culpa, quæ talem ac tantum
Meruit habere Redemptorem!'"

The whole force of the argument here depends upon the doctrine of the absolute necessity inherent in the nature of finite things, whereby a greater good could not be produced without the permission of temporary or apparent evil as a means for its production, any more than two mountains could exist without a valley between them. Created things, argues Leibnitz, for the very reason that they were *created*, must be devoid of the infinity and perfection which can exist only in Him who is increate and eternal; and hence they are necessarily subject to all the evils which are inherent in finitude and imperfection. This is what he calls the Metaphysical evil inseparable from this world's affairs, which even omnipotence cannot remove, since the supposition of its removal would be a contradiction and an absurdity; and it is easy to show, that what are called Physical and Moral evils are among its necessary consequences. But progress in virtue is a greater good than the mere attainment of happiness; well-being is subordinate to well-doing, and must often be sacrificed in order that the latter may be possible. Thus, each individual virtue presupposes the existence either of unhappiness or wrong. Courage cannot even be conceived to exist without danger, nor fortitude without pain. There could be no temperance without the liability to excess, and no benevolence unless there were wants to satisfy or sufferings to relieve. Even veracity would be no virtue, if one could not help telling the truth. He who could not do harm or wrong might still be innocent, it is true; but there would be no merit in his innocence. In short, merit consists in withstanding temptation, alleviating pain, and opposing wrong; so that, without the presence of these evils, there would be nothing to praise and nothing to blame. We may boldly affirm the optimistic doctrine, then, that a world

without either suffering or sin would not be an improvement on the world as now constituted.

The key to the proof of Leibnitz's system is the sharp distinction between necessary and immutable truths on the one hand, and empirical or contingent considerations, — truths of fact or physical laws, as we should call them, — on the other. The former consist of the original intuitions of pure reason, like the Principle of Sufficient Reason, the necessary laws of Thought as set forth in pure Logic, the axioms of Mathematics, and the like. These, with the necessary syllogistic deductions from them, are metaphysical verities, which cannot be overruled by God himself, any more than he could make two and two to be five, or a dishonest action to be right and obligatory. They are God's truths, for they are what he eternally thinks, and they constitute his nature; to suppose that he would or could abrogate them, would be to suppose that he should act contrary to his own nature; that is, that he should cease to be God. And this distinction between *truths* is applied also to *existences*. There are absolute and necessary existences, such as those of God himself, of space, of time, of everlasting right or the moral law. To ask if the Almighty could annihilate space, or stop the flight of time, or contradict the truths of mathematics, or reverse the obligations of the moral law, is to ask if God could annihilate himself, — if he could cease to be.

On the other hand, there are contingent existences, such as that of all *real* objects; and there are empirical truths, such as physical laws, even those of the highest generalization and the broadest scope, — the Laws of Motion, for instance, being included. These are the results of God's free will and creative agency, and are continued only during his good pleasure. They are discovered by observation and generalized by induction. Infinite power could reduce all created things to the nothingness whence they were drawn; — could reverse the laws of nature, cause stones to fly upward; motion to be not in right lines, but in curves; particles of matter to repel instead of attracting each other; grapes to grow on thorns and figs on thistles. Nay, we have not the slightest *assurance* that he will not do so the very next hour; only we are so much the slaves of habit, so prone to think that what has been will be, though there is not the slightest necessity for so thinking, that we find it hard to believe that he will. Let the Empiricists and the Positivists talk as they may about the universality and the certainty of physical law; if they mean thereby the necessary continuance of such law one hour beyond the present time, their

assertion rests upon no scientific evidence whatever, but merely on an innate belief, or an acquired though persistent habit of thought. Infinite power could instantly destroy every object in this room, you and me included. But there is something which even infinite power cannot do: annihilate the space which this room now occupies, or call back the hour which has just elapsed.

Now observe, Leibnitz rests his system of Optimism, his proof that this is the best of all possible worlds, on principles and reasoning of the former sort, that is, on necessary and immutable truths. Accordingly, any argument against that system drawn from facts, from sensible evidence, from citing instances of actual sin and misery, corruption and death, — is simply irrelevant and illogical. If facts seem to contradict mathematical conclusions, so much the worse for the facts; correct your observations of them; try your experiments over again, for *they* may be wrong; mathematics and metaphysics must be right. The office of observing facts is to verify theoretical conclusions, never to contradict them. One who should attempt to invalidate the geometrical proof, that the three angles of every triangle are precisely equal to two right angles, by cutting a triangle out of wood, actually measuring its three angles, and finding that they did not sum up *just* 180 degrees, would very properly be laughed at. "This," said Euler, at the close of a long and abstruse mathematical investigation, "this is contrary to all experience; *and yet it is true.*" Professor Peirce showed an equally daring confidence in his mathematical analysis, on occasion of the discovery of the planet Neptune. The calculations of Adams and Le Verrier proved that a new planet ought to be found at a certain precise spot in the heavens; the astronomers pointed their telescopes to the spot, and there it was. Mr. Peirce went over the computations again more carefully, and found that the theory and the fact did not coincide after all. The agreement between the prediction and the fact was merely accidental; the observed planet was not the same with the predicted planet. No matter about the former being seen just at the right spot; it had no business to be there. That one was found there was only Le Verrier's good luck. And further investigation showed that Mr. Peirce was right. Just at that epoch — the only time, I believe, in a period of seventy or eighty years — the observed planet and the calculated planet happened to be nearly in the same line of vision as seen from this earth; but the one was not the same as the other, for the one was at the distance of thirty, and the other at the distance of thirty-six. With an equally lofty confidence, a

follower of Leibnitz might contemptuously put aside the sarcasms of Bayle and Voltaire, founded on the observed presence of sin and misery among men. The apparent contradiction must be capable of being explained away, whether we succeed in so explaining it, or not. The "Theodicy" contains Leibnitz's attempt at an explanation of the facts, most of which was repeated by Pope.

This contemptuous estimate of mere empiricism, when it conflicts with the deductions of pure reason, is one of the characteristics inherited from Leibnitz by all the modern philosophy of Germany. Descartes is not more evidently the founder of the French school, the progenitor of Malebranche and Cousin, than Spinoza and Leibnitz are of the German transcendentalists, of the philosophy that transcends experience, — of Kant, Fichte, Schelling, and Hegel. The English school, with a strong tendency to sensualism or empiricism, was established by Hobbes and Locke. Truths made known to us *a priori*, or antecedently to experience, with their attributes of universality and necessity, have been the fundamental doctrines of German philosophy ever since the time of Leibnitz.

It was of a piece with the towering ambition and self-confidence of Leibnitz, to regard this system of Optimism, and this mode of establishing by intuition and demonstration all the truths, not only of philosophy, but of theology, as a possible means of reconciling all differences among Christians, of healing the schism between the Reformed and the Catholic churches, and of once more uniting all true-hearted believers into one fold and under one Shepherd. He had power and consideration enough to interest many of the princes and great minds of Europe in this scheme; he was actively employed in negotiations for the purpose, all his skill as a diplomatist being brought into play; he corresponded with the great Catholic bishop, Bossuet, on the subject; and at one time, seems actually to have had hopes of success. But the pride, the obstinacy, the selfishness, and the ignorance of men!

Another proof of the unequalled presumption, as well as the marvellous genius of Leibnitz, was his scheme of a universal and real character; — that is, of a writing which should express all thought by a series, not merely of conventional, but of natural symbols, having the utmost brevity and precision, and equally intelligible to men of all nations and tongues under heaven. Chimerical as such a scheme may appear, it cannot be denied that, in the Arabic numerals and the symbolic notation of Algebra and the Infinitesimal Calculus, to which that of Chemistry, and in some degree of Logic, has recently been added, we have approximations

to such a character, carried out on a small scale, indeed — mainly limited to the relations of quantity, but of marvellous power in abbreviating and facilitating the most abstruse processes of thought, as well as the communication of it to others. In fact, could Leibnitz now revisit the earth, he might well say of these very improvements in the language of Chemistry and Logic, the vast importance of which only the adepts in those two sciences can thoroughly appreciate, "This is my scheme; so far as it has gone, it is the very realization of my endeavor. I gave out the problem, I indicated the means of solving it, and the advantages which would follow from its solution; and only the multifarious occupations of my busy life prevented me from accomplishing more in this direction, by my unassisted efforts, than all the *savans* of Europe have done by a century and a half of labor." As it was, the project furnished only one other illustration of the philological attainments, the philosophical genius, and the Titanic aims of the man who could thus strive to unite all the nations of the earth in the bonds of a common religious faith and a universal language. If the person ever lived who could have remedied the catastrophe at Babel, furnished a common method for all the sciences, and blotted out all the differences among the churches, that man was Leibnitz. It should be mentioned that he wrote equally well in three languages, in addition to large attainments in many others, and that the contrivance of an admirable notation for the Infinitesimal Calculus, far superior to that of Sir Isaac Newton, and now universally adopted even by the English, was exclusively his work.

The Monadology of Leibnitz, which includes most of what is original and peculiar in his system of philosophy, is, in the main, a deduction from his doctrine of Innate Ideas, and from his three fundamental axioms, the Principle of Sufficient Reason, the Sameness of Indiscernibles, and the Law of Continuity. Indeed, these three may properly be considered as one, since it can be easily shown, that the second and third are necessary corollaries from the first. The full enouncement of this single axiom is, that no phenomenon can exist or take place, and no judgment be valid, without a Sufficient Reason why it is so rather than otherwise. Then the Law of Continuity necessarily follows, since there is no Sufficient Reason why a series should be broken at one point rather than another, or why two places should be filled, while the intermediate one is vacant. We are also compelled to admit the remaining axiom, that there are not in the universe two perfectly similar — that is, absolutely indiscernible — beings or objects; if there were, God

would act without Reason in assigning them to different places and times, as must be done if they are numerically distinct, since two things cannot occupy the same place at the same time. Hence we are justified in assuming that nature does nothing *per saltum*, or by abrupt transitions; but all events, all objects, proceed from infinitesimal germs, develop by successive and extremely minute steps, and pass into each other by imperceptible gradations; the process being all the while checked by the counter principle, of the Sameness of Indiscernibles, so that, however near each other, no two are ever absolutely indistinguishable, for then they would coalesce, and become one and the same thing. In the whole realm of nature there cannot be found two portions of matter, two minds, two events, two anythings, that are perfectly equal and similar. No two leaves of the same tree, no two faces or two characters in however vast a multitude of persons, no two roses on one stalk, no two drops of water, ever are perfect counterparts of each other. This is a fact of experience, which confirms and justifies the *a priori* principle. History — experience — never exactly repeats itself. God puts his individual mark upon each particular thing and incident; and yet each one slides and shades into that which is nearest to it without shock or leap, but with a delicacy surpassing the nicest discrimination.

Here at once is the germinal principle of the Infinitesimal Calculus, — either that which put Leibnitz upon the track of this grand invention, or, what is perhaps more probable, which he deduced or generalized from it, after the mathematical contrivance was perfected. The infinitesimal element of every curve may be regarded without error as a straight line, into which it passes by imperceptible gradations; and yet it is not straight, for if it were, integrating it would not reproduce the curve, but would generate a straight line. In like manner, a body never passes from rest to motion, or from motion to rest, except by imperceptibly fine degrees, though an infinitude of these may take place in a moment of time. Even when a bullet is propelled by the explosion of gunpowder, the velocity rises from the minimum to the maximum by uniform increase. Leibnitz, indeed, maintains, what I believe is now universally admitted, that there is no absolute rest in the universe; and he is also the author of what has been claimed as a very recent discovery in science, the conservation of the same amount of force forever, none ever being properly generated, and none really destroyed. "Thought is to the soul," he says, "what motion is to body. A soul absolutely without thought, and a body absolutely without

motion, appear to me equally contrary to nature and without example in the world." This follows, indeed, from his Law of Continuity; as the transition from one to the other would be a positive *saltus*, or shock of entire change from one thing to its opposite or contradictory. "A substance once in action," he argues, "will be always in action; for all impressions on it, or impulses of it, continue, and are only mingled with new ones, as in the parallelogram of forces. By striking a body, we excite in it an infinity of little whirlpools, as in a liquid; for in fact, every solid has a degree of liquidity, and every liquid a degree of solidity, and these internal whirlings can never be entirely stopped. I should prefer the word firmness, or still better, consistency or cohesion, to hardness; all bodies have some degree of *cohesion*, as we see from the drops of water or mercury; as they also have some degree of *fluidity*. Thus, wax is always somewhat soft, even before heat has reduced it to a fluid. Thus, in my opinion, the atoms of Epicurus, the hardness of which is supposed to be invincible, cannot exist, any more than the subtle matter, 'perfectly fluid,' of Descartes."

All this is only the modern chemical doctrine of molecular action, and that heat is merely a form of motion. Body is never without some heat, as none is ever found at an absolute zero of temperature. Then there is always some molecular action within it, and this is the motion in an infinity of little whirlpools, which was conceived by Leibnitz. We are not so much struck here, I think, with the anticipation of some of the most renowned scientific discoveries of our own day, though this is sufficiently remarkable, as we are with the fact, that these doctrines are now claimed as the legitimate results of the Baconian method, — of experimentation and the logic of induction; whereas they were anticipated by Leibnitz through rigorous deduction from his three *a priori* axioms, and therefore they appear, in his view of them, not as isolated contributions to a loose aggregate of scientific facts, but as articulated and intertwined with each other, and as necessary component parts of one system of philosophy. They are not generalized from experience, but demonstrated by reasoning from abstract principles, like the theorems of geometry.

As there is no body without movement, argues Leibnitz, so there can be no space without body. The doctrine of a *plenum*, or the denial of the possibility of a perfect *vacuum*, is another consequence of the Leibnitzian axioms. Were there an absolutely void space, there would be a *saltus*, a shock of transition, from this to pure body or corporeity, which is impossible. This mode of reasoning

is carried further, to a denial of the objective existence both of time and space as separate entities. Both are only relations, and as such, are mere conceptions of the mind, which have nothing answering to them externally, or apart from the intellect. This is a very close approximation to the doctrine which Kant long afterwards made so famous. Time and space are necessities of the intellect, or forms of sense necessary for bringing about an intelligible conception of existing things. Space, says Leibnitz, is the relation of coëxistent things to each other, just as time is the relation of successive existences. They are nothing apart from the existences contained in them. The universe is infinite, as are the power and wisdom of its Creator, — infinite both in extension and in succession; for if it were limited and finite, there would be no Sufficient Reason why it should be *here* rather than *there*, or *now* rather than at any preceding or subsequent moment. There may be development and change, — passages from, through, and towards infinitely varied forms of being; but there can be no *saltus*, no leap, such as would be creation or annihilation at any one time. The soul is necessarily immortal. Again, were there a void space or a void time, two equal contiguous portions of either would be perfectly similar to each other, and there would be nothing whereby the first could be distinguished from the second; and this, by the law of the Identity of Indiscernibles, is impossible.

To diminish the quantity of matter in the universe, — that is, to suppose it less than infinite, — would be to diminish the number of objects upon which God might exercise his goodness; and this would be to derogate from the perfection of his act. There is no possible reason for limiting the quantity of matter; and if we suppose the limitation of it to be arbitrary, we affirm that God could act without a reason, which would be inconsistent with his infinite wisdom. In like manner, if active force were lost or dissipated in any part of the universe, through the physical laws which God has established there, then a new act would be necessary to restore this force, just as a workman must make a fresh effort to remedy the imperfection, or the wear and tear, of his machine; and this would be a disorder or defect, in relation not only to us as human beings, but to God himself. But we are not justified in imputing any imperfection to the author and finisher of all things. "When I say," continues Leibnitz, "that God has opposed to such disorders sufficient remedies taken beforehand, I do not mean that he suffered the disorders to come first, and then applied the remedies;

but my doctrine is, that he found means beforehand to prevent the occurrence of the disorders."

The purpose of Leibnitz in the Monadology is to ascertain the existence, and determine the nature, of the first or simplest elements of substance, the primal units of being, into which all things may be resolved. There must be such units, he argues, as otherwise there could be no compound or aggregate, since the very idea of a compound is that it consists of an aggregation of what is simple. These primary elements of being, which in themselves are absolutely simple and indivisible, he calls Monads. They are metaphysical units, or the units both of matter and mind, both of organic and inorganic substance. They are not only the seeds or germs of all things, but they constitute all things, as all composite being is made up of them, and can be resolved into them. Life is inherent in them, since, in the ordinary course of nature, they never really begin or cease to be. Originating only in the primitive act of creation, and incapable of dissolution because they do not consist of parts, they cannot perish except by annihilation. Though the action of all of them is harmonious, each conspiring, so to speak, with all the others, so as to keep up not only the individual harmony of each separate living organism that is constituted by them, but also the general harmony of the universe, yet no one Monad ever directly acts upon another, so as to produce any change in it, or in any way to affect its mode of existence. Each is an independent creation, the whole series of its modes and acts throughout its history being determined solely from within, being only the development of those inherent energies and propensities with which God endowed it at the moment of its emanation from him. Each would run through its whole appointed cycle of acts and developments, precisely as it now does, though it were alone in the universe. Innate *force*, incessant activity, is its essence, its nature; it always acts, it is never acted upon. It is never passive. One Monad cannot act on any other by impact, argues Leibnitz, because being absolutely indivisible, no such transposition or altered relation of parts can take place within it as is possible in a composite body. No change, then, can be produced in its external state; and as perfectly simple, "it has no windows," through which any foreign agency could enter or go out, so as to affect its internal condition. No two Monads are perfectly alike, this being forbidden by the Law of Indiscernibles; the only difference between them consists in the greater or less development of their internal and innate energies. Inorganic nature is an aggregate of undevel-

oped or *sleeping* Monads; an animal's life is a *dreaming* Monad; man is a Monad that has been *waked up*. These are not distinguishable in kind, but only in degree; the difference between them, immense as it appears, consists only in the widely separated stages of development which they have respectively attained.

The doctrine of Preëstablished Harmony is pithily expressed by Leibnitz, when he says, "every body acts as if there was no soul, and every soul acts as if there was no body, and yet both act as if each was influenced by the other." And in like manner, every part of the universe harmonizes with every other part, though without the slightest mutual dependence or interaction. The doctrine of a *plenum* leads us to conceive each Monad as standing in definite relations to every other Monad, and hence that every change, wherever produced, is propagated through the whole mass, though in a ratio diminishing with the distance. Each Monad, then, undergoes some corresponding change, and thus each becomes a *microcosm* reflecting the *macrocosm*, or a perfect mirror of the universe. The same conclusion follows from the doctrine, that the boundless knowledge which may be developed in the highest state of being, and which, as such, includes a comprehension of all things in their relations to each other, is all really innate in every Monad, even in its lowest and most rudimental stage. Creation, in fact, consisted in first establishing, once for all, the laws of this perfect unity and harmony. The drama of the universe was entirely arranged, all the parts were assigned, and every incident, thought, and motion foreseen and provided for, when that universe was first called into being; otherwise, the prescience and omnipotence which we attribute to its Creator would be words without meaning.

According to Descartes, as we have seen, the universe is made up of matter and mind, which have nothing in common, the essence of the former consisting in extension, and of the latter in thought. Between these two there is an unfathomable abyss, which can be bridged over only by the incessant action of God, as in Malebranche's doctrine of Occasional Causes, since otherwise there would be no possible communication between them. But according to the Law of Continuity, argues Leibnitz, there cannot be such a gulf, or *saltus*, between unthinking Matter and unextended Thought. Moreover, as extension is only limited space, the unity and infinity of space lead directly to the doctrine of One infinite substance, whose immanent action produces the world of phenomena; — that is, to the pantheism of Spinoza, who takes away the necessity of a bridge by maintaining that thought and extension are both

attributes of one Substance. We must begin, then, says Leibnitz, by reforming the Cartesian notion of Substance. It is not true that all the attributes of matter can be derived from motion and extension. The latter, indeterminate in itself, receives figure or shape only from motion; and space itself, being immovable, cannot be the principle of motion. There must be something, apart from mere extension, which can be moved, and also which can have, either in itself or *ab extra*, a cause or principle of motion. Besides extension, then, Substance must contain *force* — an active power — an indwelling cause, not susceptible of corruption or exhaustion, but enduring forever, — a true vital force, with which God endowed it at creation. According to Leibnitz, the essence of corporeal substance is ever-during Force. Thus only can we explain inertia, and many other phenomena of corporeal substance. To Descartes, the universe is a mere geometrical conception, and he reasons about it like a pure mathematician. Leibnitz regards it as a physicist, reducing it to a purely dynamical system. The Force with which he endows it is a power not only to move, but to think. In both cases, the Force may be concealed, but it always exists, as we see in the case of a taut cord stretched by a weight, or a bent bow; or even in the cases of impenetrability and gravity. It is not a Force which needs an impulse from without before it can come into activity; but its action is self-produced and continuous, a restless vital energy, which is never spent. Matter has always a tendency to motion, repulsion, or attraction, which will manifest itself when obstacles are withdrawn. In like manner, according to Leibnitz, it has a susceptibility, or rather an original stock, of sensations, perceptions, and *appetitions*, which exist, however, only in a confused and latent state, and never rise to consciousness, except in advanced stages of corporeal existence. All the knowledge which the soul ever obtains was innate in it from the beginning; and *education*, as the etymological meaning of the word imports, is not putting information into the mind, but only *drawing out* its latent stores. This mental evolution is constantly going on; the *appetitions*, as Leibnitz calls them, are the primitive desires and inclinations, which are the springs of our mental activity, keeping up the series of our intellectual states by constantly hurrying the mind from one perception or thought to another. Many familiar facts evince the presence and the action of a multitude of these unconscious perceptions. Thus, when at some distance from the shore, we hear only one uniform murmur or roar from the dashing of the sea upon the rocks, but cannot distinguish the sound

made by any one wave. Yet this general effect could not be produced, if each particular wave did not contribute to it its own portion of sound. Thus, also, a forest at a distance appears only as an indistinct mass of green, to which each leaf, however, though separately invisible, must impart its own share of color.

"We may even say," Leibnitz argues further, "that it is through these minute latent perceptions, that the present is big with the future and loaded with the past; that all things conspire together —*σύμπνοια πάντα*; and that in the smallest substances, eyes as piercing as those of God might read the whole series of events in the universe, —

Quæ sint, quæ fuerint, quæ mox ventura trahantur.

These unconscious perceptions also mark and constitute the individuality of each person, through the traces which they preserve of his former states as connected with his present being; and they might be observed by a superior intelligence, even when the man himself had no express remembrance of them."

The will of God needs not to be incessantly applied, as it were by a continual miracle, to produce all the movements of matter, and all the communication between soul and body, these two remaining eternally inefficient and incapable of affecting each other. Such a theory degrades the Deity into an unskilful workman, who must be constantly remedying the deficiencies of his work, — pushing the hands of his clock, in order to make it go and mark true time. This would be a mere *deus ex machina*, — a God of occasional interference, compelled to act on all emergencies, even the slightest. In the view of Leibnitz, ours is a mechanical universe, wound up, once for all, at the creation, and manifesting the perfections of its author by never afterwards needing his intervention or aid, in order to do perfectly its destined work. This, according to him, does not contradict the doctrine of the eternal oversight and kind Providence of God; since all occasions were foreseen, and all emergencies provided for, in the plan of creation at the outset. What appears to us as supernatural intervention, — a revelation, for instance, or an answer to prayer, the fall of Adam, and the subsequent redemption of the world by Jesus Christ, — were preordained and first constituted in the immutable counsels of God, when he called the universe into being.

In the beginning, God created the heaven and the earth, not merely in the state in which they first appeared, but in their whole subsequent history. But it will be objected, then, says Leibnitz,

that "our prayers and vows, our merits or demerits, our good or bad actions, are of no avail, since nothing can be changed. This objection is most embarrassing to the vulgar, and yet it is a pure sophism. The prayers and vows which are now uttered, the good or bad actions which are done to-day, were already before God when he resolved to create this particular world. All that now happens was represented in the idea of the world, when as yet it was only a possible universe; every action appeared there as drawing upon itself its legitimate consequences of reward or punishment, through the ordinary or special grace of God; and all this is actually carried out in the world as it now exists."

This, indeed, is the distinctive feature of the philosophy of Leibnitz, that it completely harmonizes the mechanical with the teleological view of the universe. What is called the uniformity of physical law is never broken, yet every event conforms to the purposes of the moral government of God, as it was intended to do from the beginning.

All created substances, according to Descartes, are passive; all, according to Leibnitz, are active, and their activity even constitutes their essence. The proper designation of his philosophy is Dynamism; Matter is force, is activity, is *actuality*. That which does not act, he says, does not merit the name of substance. To affirm that God cannot extend or prolong his action beyond the present moment, so that the effect can be continued only by constant repetition of the cause, is to deny the efficacy of the Divine will, and even to misconceive the nature of force, which, once constituted, must be permanent. The Deity conferred upon his creatures from the first a certain measure of efficiency, which is the ultimate principle of all the various phenomena that they produce. The force with which they are endowed, as we have said, is not a simple potentiality, which would need excitement from abroad before it could be brought into play; but it is a true entelechia, or active force, involving effort, and having in itself all that is necessary in order to produce action.

To get rid of the difficulty of explaining the reciprocal action of matter and mind, that stumbling-block of all systems of metaphysics, Monads are conceived to be a sort of intermediate existences between pure hard atoms, which, as elements of Matter, are incapable of thought, and pure ideas, which, as products of thought, have no reality outside of the mind which conceives them. As a real existence manifested to sense, Matter is always a complex or aggregate, consisting of many simple indivisible elements; other-

wise, there would be a plurality or multitude not consisting of units, which is a contradiction. These units cannot be mere mathematical points; for as such points have no magnitude, no multiplication of them, any more than of zeros, could make up a visible or tangible extension. Then the elements or primary constituents of matter, — in fact, of all existence, — are, not mathematical points, as the geometer would have it, not hard atoms, as the physicists would say, not molecules, according to the chemist, but Monads, infinite in number, because the doctrine of a *plenum* makes them fill the universe. What we call a particular body is an aggregate of these Monads of a lower or higher order, and with or without a governing Monad, which gives more or less unity to such an aggregate. Is it a mere stone? This is an aggregate of Monads of a very low order, manifesting no other force than what appears in cohesion, gravity, and impenetrability; for though virtually possessing the force of sensation and thought, this is only latent, and never rises to consciousness. Is it a lump of iron ore? Then, besides the forces just mentioned, it has malleability, ductility, imperfect elasticity, magnetic force, etc. Go a little higher: is it a crystal? Then, besides the above mentioned powers in each element, there is a governing Monad giving unity to the mass, through allowing its elements to come together only in one peculiar shape with definite sides and angles. Of course, since no one Monad ever really acts on another, it is said to *govern* the others only because all the parts act together harmoniously, *as if* they were directed by one central power. Is it a plant? Then it has one governing Monad of a higher order, — what the botanist would call its specific vegetable life and character, — which vivifies and animates the whole organism, and determines its peculiar shape and functions. Go higher still: is it an animal? Then, locomotive energy is added to the previously named forces, and sensations and perceptions, before latent, are developed and become manifest. Is it man himself? Then the governing Monad is the human soul, in which sensation and thought rise to full consciousness, — which has not only perception of outer things, but *apperception* of itself, and a cognition of moral law and responsibility. Further still: — the Law of Continuity, forbidding sharp transition anywhere, requires us to believe in an infinite series of still higher governing Monads, — spirits, angels, and archangels, a celestial hierarchy rising up even to the throne of God himself. And of God, we must think reverently that he is the one governing and creating Monad of the universe, alone combining in himself infinite power, perfection, and goodness.

We can now understand whence Pope obtained his conception of a scale of existences, acting together in the best possible order, and thus constituting the universe which Infinite Wisdom and Goodness originated and governs.

> "See through this air, this ocean, and this earth,
> All matter quick and bursting into birth.
> Above, how high progressive life may go!
> Around, how wide, — how deep extend below!
> Vast chain of being, which from God began,
> Natures ethereal, human, angel, man,
> Beast, bird, fish, insect, what no eye can see,
> No glass can reach; from Infinite to thee,
> From thee to nothing. On superior powers
> Were we to press, inferior might on ours;
> Or in the full creation leave a void,
> Where, one step broken, the great scale 's destroyed.
> From nature's chain whatever link you strike,
> Tenth or ten thousandth, breaks the chain alike."

I quote Leibnitz's own language, to show how precisely he anticipated the speculative theories which are now absorbing the attention of our botanists and zoölogists. "All beings," he says, "form but a single chain, in which the different species, like so many rings, so pass into and are fastened to each other, that it is impossible for the senses, or even for the imagination, to fix precisely the point where any one begins or ends. All the classes which border on each other, or which occupy, so to speak, the points of divergence or alteration, must be equivocal, and have attributes which can be referred equally well to either of the two neighboring species. Thus the existence of Zoöphytes, or Plant-animals, is nothing monstrous or unnatural, but is strictly conformed to the whole existing order of nature. And such, in my opinion, is the force of the Law of Continuity, that not only I should not be astonished to learn of the discovery of animate beings which, in many of their properties, — for example, those of nutrition and propagation, — might pass for vegetables just as well as for animals, but I am even convinced that there must be such, and that natural history will, at some future day, point them out to us." A bolder prophecy, or one more exactly verified, after the lapse of more than a century, it would be difficult to find in all the annals of science.

According to this theory, what we call *death* is the mere dissolution or resolution of a corporate body into its elementary Monads, these last being essentially indestructible, and subsequently uniting themselves, with larger and more fully developed powers and capacities, into new compounds, therein to pass through higher stages

of existence. Thus, progress, as well as continuity, is a law of the universe. Thus the governing Monad of man, before it had risen to its present state of apperception or self-consciousness, had passed through a long series of connected stages of being. Originally formed "of the dust of the ground," it was one of the constituent Monads of mere inorganic substance, before God "breathed into his nostrils the breath of life, and man *became* a living soul." The history, given in the book of Genesis, of the order of creation, briefly indicates some of the intermediate conditions through which it passed, first in vegetable and then in animal life, but always rising in the scale. And after its separation from the present body, it will pass, with higher energies and aspirations, successively into other corporeal forms, carrying along with it dim memories and adumbrations — that is, ideas now innate — of what it had learned in previous earthly homes. It will thus be enabled to play a higher part, to exercise a more stirring and ennobling influence, on the great theatre of humanity; and then, again, it is to mount to a higher stage, and as pure spirit, angel or archangel, to ascend gradually through the infinite scale which points towards, but never attains, the perfections of the Almighty. Incessant activity, incessant thought, is a necessity of its being, from the lowest round even to the highest. The perceptions, the thoughts, are dim, vague, and unconscious, — are as if they were not, in the lower Monads; but they gradually eliminate obstructions, become clear, distinct, and adequate, and soar into celestial cognitions. In sleep, in swoons, in death, the succession of thought is never entirely broken, and may even become more crowded, more rapid and intense, as the outward scene shifts, and the connections with lower forms of existence are severed. Memory is a sensitive plate, which never entirely loses an impression once made upon it; but though myriads of these become for a while too dim to be visible to consciousness, yet they are still there, ineffaceably engraved, the germs of our subsequent distinct cognitions.

Leibnitz repudiates, however, the doctrine of metempsychosis or transmigration of souls. His theory, he says, is that of metamorphosis and development, as exemplified in the transmutation of the grub into the butterfly. For as all bodies, he argues, are in a state of perpetual flux, like a river, particles continually entering and leaving them, so the soul changes its body only little by little, and is never deprived altogether of its embodiment; though by elimination of its grosser parts, this may become so small as to be imperceptible to sense, just as it was before birth. There are no

souls wholly separated from a body. God alone is absolutely detached. What we call birth is but development and accretion from preëxisting germs, and death is only involution into forms which have become exceedingly minute. As there was undoubtedly preformation in the germ even before conception, there was also an embodied soul lodged in it, and waiting to be evolved. In a word, the animal itself was there already, and by conception was only made ready to be transformed into a creature of a higher type.

It is curious to find the Law of Continuity, to a considerable degree, anticipated, of all persons in the world, by homely John Locke, who writes: "It is a hard matter to say where sensible and rational begin, and where insensible and irrational end; and who is there quick-sighted enough to determine precisely which is the lowest species of living things, and which is the first of those which have no life? Things, as far as we can observe, lessen and augment as the quantity does in a regular cone, where, though there be a manifest odds betwixt the bigness of the diameters at a remote distance, yet the difference between the upper and under, where they touch one another, is hardly discernible." Those who are curious may be referred to the 519th number of "The Spectator," where will be found a further citation from Locke, and the whole subject adorned and illustrated by the fine genius and earnest Christian faith of Addison.

What Leibnitz and others confidently prophesied, though they had no lamp to guide their steps save their *a priori* anticipations of what must be the course of nature as evolved by an all-wise Providence, has been amply verified by the researches of modern science. "One word," says Mr. W. R. Grove, in his Address to the British Association in 1866, "one word will give you the key to what I am about to discourse on; that word is *continuity*, no new word, and used in no new sense, but perhaps applied more generally than it has hitherto been." "The more we investigate," he says, "the more we find that, in existing phenomena, graduation from the like to the seemingly unlike prevails, and in the changes which take place in time, gradual progress is, and apparently must be, the course of nature." And he proceeds to apply this view to the recent progress of the more prominent branches of science, — to astronomy, geology, biology, the origin and nature of species, the history and social institutions of man, finding everywhere proofs that recently discovered intermediate links fill up or bridge over what once appeared to be breaks and chasms, thus satisfying us that "*continuity* is a law of nature, the true expression of the action of Almighty Power."

Applying this Law of Continuity to animate nature, Leibnitz says: "Every living organism is a sort of divine machine, or natural automaton, infinitely superior to any engine of man's device. For a machine made by human art is not a machine in each of its parts; a fragment of the tooth of a ratchet-wheel, for instance, has in it nothing artificial, nothing which indicates its relation to the purpose for which the whole machine was contrived. But nature's machines, *i. e.* living organisms, are machines down even to their infinitesimal parts." "Every portion of matter may be conceived as a garden full of plants and as a pool stocked with fish. Moreover, every branch of such a plant, every part of one of these animals, and every drop of the liquids circulating in its body, is again such a garden and such a pool." "Thus there is nothing crude, sterile, or dead in the universe, no chaos or confusion, though there may be what seems such; just as in a pool, if viewed from a little distance, one may see a confused movement and stir produced by the fish, though he cannot discern the fishes themselves." "Thus it appears, not only that every living organism has a dominant Monad which is the soul of that animal, but also that each of its limbs and parts is full of other living things, plants and animals, every one of which, again, has its entelechia or dominant Monad."

When these doctrines were first published, nearly two hundred years ago, they must have been regarded as the wild speculations of a fanciful theorist; for the microscope was then in its infancy, and the science of histology had not yet come into being. But as now read, we find in them an astonishing anticipation of the latest discoveries and theories of the biologists of our own day. The "cell-gemmules" of Mr. Charles Darwin, and the "physiological units" of Mr. Herbert Spencer, so minute as to be descried only by the eye of theory, for they are far beyond the highest powers of our improved microscopes, are only the modern representatives of the Leibnitzian Monads. They are now held up as the most advanced results of inductive science, or, if you will, as the supposed limits or goals, towards which the sciences depending on observation and analysis are tending and preparing the way. But to the eagle-eyed thought of Leibnitz, they were necessary deductions from the single axiom, first propounded by him as dominating the universe of existing things, the Principle of Sufficient Reason.

"Physiologists agree," says Mr. Darwin, "that the whole organism consists of a multitude of elemental parts, which are to a great extent independent of each other. Each organ, says Claude Bernard, has its proper life, its autonomy; it can develop and repro-

duce itself independently of the adjoining tissues. The great German authority, Virchow, asserts still more emphatically that each system, as the nervous or osseous system, or the blood, consists of an 'enormous mass of minute centres of action. . . . . Every element has its own special action, and even though it derive its stimulus to activity from other parts, yet alone effects the actual performance of its duties.'" Admitting, then, as the result of observations made through the microscope, the cells or units of the body to be autonomous, "I go one step further," continues Mr. Darwin, "and assume that they throw off reproductive gemmules. Thus an animal does not, as a whole, generate its kind through the sole agency of the reproductive system, but each separate cell generates its kind." "We cannot fathom the marvellous complexity of an organic being; but on the hypothesis here advanced, this complexity is much increased. Each living creature must be looked at as a microcosm, a little universe, formed of a host of self-propagating organisms, inconceivably minute and as numerous as the stars in heaven."[1]

At what precise point, then, do Leibnitz and Darwin begin to diverge from each other? Just here; that while the former maintains that all the inherent energies and propensities — the internal machinery, so to speak — of each Monad were preformed in it by its Creator when the universe was first called into being, Mr. Darwin says: "According to my view, the germs or gemmules of each separate part *were not originally preformed, but were continually produced* at all ages during each generation, *with some handed down from preceding generations.*"[2] But why not originally preformed? or through *how many* "preceding generations" have they been "handed down?" Six, or six millions? What valid scientific reason can be given for preferring either of these numbers to the other? Having thus gone along with us a good way on the road pointed out by Leibnitz, which tends directly upward towards the throne of God, why do you suddenly strike off from it on a by-path which leads nowhere — to "the Unknowable?" You have virtually accepted the dictum of Mr. Martineau; "surely nothing can be evolved which was not first involved;" or as Sir William Thomson, one of the highest authorities in physical science, expresses it, "the assumption of atoms can explain no property of body which has not previously been attributed to the atoms them-

[1] Darwin's *Variation of Animals and Plants under Domestication.* Am. ed., vol. ii., pp. 441, 482, 483.

[2] *Ibid.*, p. 449. The italics are mine.

selves." The cell-germs, though extremely minute, are still visible under high powers of the microscope. The distinctive properties and definite aims of each of these germs, you have admitted to be a fact needing explanation, and have framed this "provisional hypothesis" of *gemmules*, which no mortal eye ever has seen, or can see, in order to account for them. Why not go one step farther, and account for the equally definite character and tendencies of each gemmule? Either the "gemmules" are veritable Leibnitzian Monads, or are marvellously near approximations to them. If the "Pangenesis" of Mr. Darwin, or the "physiological unit" of Mr. Spencer, is a legitimate scientific hypothesis, so also is the Monadology of their great predecessor.

Catholicity of doctrine and a broad range of view are striking features of the philosophy of Leibnitz, rendering it a fit expression of the bold and comprehensive genius of the man. His chief purpose was to bridge over chasms formerly deemed to be impassable, and thereby to reconcile conflicting doctrines and systems. He filled the gap made by the Cartesians between matter and mind; he harmonized the mechanical theory of the universe, its government by universal and immutable laws, with the doctrine of a moral purpose and a special providence even in the minutest events; he reconciled Monism with Individualism, regarding them only as different aspects of the same fact, the universe on either view fitly expressing the unity of its Creator and the immensity of his work. Science and theology, adopting the same principles, moved amicably in his system towards a common goal. In the "New Essays on Human Understanding," perhaps in too boastful a tone, Leibnitz thus characterizes his own philosophy.

"This system appears to establish an alliance of Plato with Democritus, of Aristotle with Descartes, of the Scholastics with the moderns, of theology and morality with reason. It appears to take what is best from all sources, and then to advance farther than any one had gone before. I find in it an intelligible explanation of the union of the soul with the body, a result which I had before despaired of. I find the true principles of things in the units of substance, which this system brings into view, and in the harmony between them preëstablished by the primitive substance. I find in it a simplicity and a surprising uniformity, so that it may be said to be always and everywhere the same thing, some degrees of excellence excepted. I now see what Plato meant when he held Matter to be an imperfect and transitory being; what Aristotle meant by his entelechia; how even Democritus, according to Pliny,

held out the promise of a future life; how far the skeptics were right in declaiming against the senses; how animals, according to Descartes, are automata, and yet how they have souls and feeling, according to the opinion of the vulgar; how we can rationally explain the doctrine of those, like Cardan, Campanella, Henry More, and others, who give life and perception to all things; how the laws of nature, many of which were unknown before this system pointed them out, derive their origin from higher principles than those of matter, although every change in matter takes place mechanically. Finally, it is only since I have meditated upon this system that I understand how it is, that the endowment of brute animals with souls does not impair our trust in the immortality of the soul of man, but rather confirms and strengthens it, by leading us to see that all souls are imperishable."

CHAPTER VIII.

Realism, Nominalism, and Conceptualism.

As a preparation for the study of Kant and the later German philosophy, it will be convenient to point out more fully than has yet been done the distinctive functions of the Understanding and the Sense. The Imagination, also, regarded as the faculty which mediates between the Understanding and the Sense, needs to be carefully considered, in order to determine its precise boundaries and the limitations of its use. Perhaps these ends can best be obtained indirectly, while we are reviewing at some length one of those old questions, the discussion of which so often recurs at different epochs in the world's history.

One of the most remarkable controversies which have ever agitated the schools of speculative theology, and which also occupies a large place in the history of Philosophy, is that which was waged over the abstruse, and, as many would now consider it, the fantastical and absurd, question between the Realists, the Nominalists, and the Conceptualists. I do not agree with those who speak lightly of it, and regard it only as one curious chapter in the history of the follies and aberrations of the human intellect. That cannot be a merely frivolous or meaningless dispute, which the mind of man inevitably stumbles upon at every stage of its inquiries both in abstract speculation and physical science; which is debated in our own day with as keen an interest between Mill and Hamilton, between Agassiz and Darwin, as it was, over two thousand years ago, between the followers of Plato, Zeno, and Aristotle, or in mediæval times, between St. Bernard and Abelard, between Duns Scotus and Thomas Aquinas; which agitated alike the universities, the Church, and the politics of Europe; which was waged not only with the pen and the bloodless weapons of diplomacy, but with the club and the sword; and which is now just as far from a final settlement as ever.

In successive ages, it is true, the question has come up under different aspects, and theories have been formed in relation to it

for widely dissimilar purposes. Yet at bottom it is always one and the same subject, the discussion of which must affect any theory that we may form respecting the nature of human knowledge. It may be stated in terms so technical and abstruse, that it shall seem to concern only the subtle and profitless distinctions of an obsolete Scholastic philosophy; or it may be so phrased that every botanist and zoölogist, and even every chemist, of the present time, will recognize it as the topic toward which his thoughts are most frequently turned when he is occupied with the latest and farthest advanced researches and speculations of his favorite science. The limits of the present undertaking will allow only a hurried glance round the outskirts of the subject.

What is it which is before the mind, — what is it towards which our attention is directed, and about which our thoughts are occupied, —when we use General Terms; that is, when we are either speaking or thinking, not about this or that individual object or event, but about whole classes of things? It is easy enough to tell what we are thinking about, if this be some one thing, having a definite and clearly perceived aspect to our senses, — as this man, that tree, the one triangle delineated on the blackboard. It is an idea or mental picture of this one thing, either as it is now presented to sense, or represented in the imagination. Both perception and imagination deal only with individuals, as presented or portrayed with the distinct attributes which belong to this one, and to no other; since no two individuals perfectly resemble each other. A picture, whether on canvas or in the "mind's eye," which is imagination, must be of this one (say) man or horse; — perhaps an imaginary one, Hercules or Bucephalus; but still one and not many — an individual and not a class. Now, all the objects around us in nature, without exception, are individual objects, each having a character and attributes of its own; and at least two great powers of the mind, as I have said, perception and imagination, are concerned solely with these particular things. But all the words of a language are General Terms, the names of classes, — genera and species. What are we thinking about, then, what is before the mind, when we use words?

Nothing but words, answers the Nominalist; — mere sounds, which are conventional or arbitrary signs, and which have no meaning or significance, except as they suggest other words, or, when we wish to be more definite, as they call up in imagination a picture of some one individual belonging to the class of which that word is an arbitrary sign.

Not so, eagerly responds the Realist; the word is a name for the archetype or pattern, after which the whole class of things which it denotes was formed; — for the Idea of that class, which was in the mind of God before he made the world, and which is therefore a part of the plan of creation. The word, moreover, signifies the essence of the class, or its inmost nature; and individual objects belong each to its own class only through participating in that common nature, or sharing that Idea. An individual — John or William — is "man," because he has the characteristic and essential attribute of man, — because he partakes of the *humanity* which belongs to his whole class, which makes man to be man, and which, therefore, must have been in the mind of the Creator when he formed men as a class or genus entirely distinct from all other creatures which he has made. In like manner, "virtue," or "holiness," is neither a proper name of some one individual action, nor a mere abstract name, *flatus vocis*, articulate sound without sense; but it is common to the whole class of virtuous or holy actions, and is that by participating in which any act becomes holy. "Virtue" is not a mere name; it is a reality. The distinction between "virtue" and "vice" is not merely nominal, but real. When Scripture commands you to "do justly, love mercy, and walk humbly with thy God," it does not utter mere words, but enjoins something positive and real, something which God approved from all eternity, before any act was done whereby this command was executed. To deny this is to deny that there are any essential distinctions between different classes of actions and things; to deny that genera and species are really constituted in the nature of things, or are anything more than fabrications for man's convenience, — their names being applied, not indeed at random, but yet arbitrarily and by convention, through common consent, and so liable to be changed when greater convenience may require. Realism asserts that there was a plan of creation, and that there is a moral law and a natural law, according to which individual things and acts are divided into real classes, and set over against each other by inherent and essential distinctions, so that these are good and those evil, these are men and those brutes, this is life and that is death. With this view of the matter, I think we can understand how Realism came to be a substantive and earnest belief, and men became fanatics in support of it, judging their opponents to be infidels and atheists.

Then come the Conceptualists, and say to Nominalist and Realist, "you are both wrong, and the truth, as usual, lies about

half way between the two extreme opinions." Universals — abstract general ideas — are something more than mere words, and something less than real substantive entities, having a distinct and independent existence. They are — abstract general ideas. The question concerns the nature and powers of the human mind, and relates to the different classes of ideas which are presented to it, or which it is able to form. Our cognitive faculties are not limited to the senses and the imagination; if they were, then indeed our knowledge would be confined to particulars, and not only should we be incapable of rising to Universals — to General Ideas, but we should not even have names for such ideas. Words, which are general names, could never have been invented, and we should be incapable of language, like the brutes. Besides the senses and the imagination, which take note only of particulars, and which dogs and cats possess equally well, sometimes better, than men, we have intellect — the Understanding proper — the faculty of pure Thought; and the special function of this faculty is to form general ideas. And the process of so doing can be easily and quickly analyzed. The office of the Understanding is to compare particulars with each other, thereby to discern *relations* between them, and so to generalize, through becoming aware that one or more of such relations exist not only between the two particulars that were first compared, but are common to a crowd of others, to so many particulars, that, for convenience, we put them into a class by themselves. Then we give a name to that class, which is, of course, a general name, or *word;* and we think the general idea, or universal, denoted by that word, when we think the common *relation* which exists between all the members of that class, — namely, the relation of similarity in some of their attributes. The relations between things are not perceptible by sense, which takes cognizance of the things alone; neither can they be pictured by the imagination, for they have neither shape nor color; but they are discerned by the intellect. I know not how "virtue" looks. I cannot draw "goodness" on the blackboard. But what of that? I know what these words mean. I have, not a picture, but a definite concept, of them in my mind, formed by grasping together their attributes, and apprehending the relations which they bear to certain individual acts.

After this brief view of their leading characteristics, we are prepared to follow understandingly the conflict of the three theories in the history of Philosophy. Of course, there are modifications and subdivisions of each of these schools; there are moderate

Nominalists, and ultra Nominalists; and so of each of the other sects. Hobbes, Berkeley, Dugald Stewart, and John S. Mill are ultra Nominalists; Sir W. Hamilton is a moderate one and a moderate Conceptualist; Plato and the orthodox Schoolmen are Realists; Locke, Dr. Reid, and nearly all the German logicians and metaphysicians are Conceptualists. My own opinion is in favor of all three, as I hold that the Realist, the Nominalist, and the Conceptualist has each caught some shade or aspect of the truth neither being wholly right or wholly wrong.

Among the ancients, Plato and his followers held, that, although universal ideas are not copied from objects observed by the senses, yet they have an existence independent of the human mind, and are no more to be confounded with the Understanding which thinks them, than material things are to be confounded with the senses which perceive them. The individuals which make up a species or genus must have something in common, — some leading element or attribute on which all their other elements and attributes depend. And the mind is capable of discerning this common element, though it is unpicturable to imagination or sense, and thereby of reasoning about the whole class as easily as about one individual of that class. "The Idea of a thing," says Plato, "is that which makes one of the many; which, preserving the unity and integrity of its own nature, runs through and mixes with things infinite in number; and yet, however multiform it may appear, is always the same." He held that of every species of things there is an Idea which has existed from all eternity, and that this is the exemplar or model, according to which the individuals of the species were made. This theory is summed up by the Schoolmen in the phrase *universalia ante rem.*

The Platonic Idea has its modern representative in what our naturalists call the Type of each species or class. Speaking of the cell of the hive-bee, Dr. Jeffries Wyman says, "here, as is so often the case elsewhere in nature, the type-form is an ideal one, and with this real forms seldom or never exactly coincide." And Dr. Whewell remarks still more explicitly; "Natural groups are best described not by any definition which marks their boundaries, but by a type which marks their centre. The type of any natural group is an example which possesses in a marked degree all the leading characters of the class." Then "a natural group is steadily fixed, though not precisely limited; it is given in position, though not circumscribed; it is determined not by a boundary without, but by a central point within, — not by what it strictly excludes,

but by what it eminently includes; by a Type, not by a Definition." Coleridge tells us also, that Idea and Law are the same thing seen from opposite points. "That which contemplated objectively, or as existing in the world without, we call a Law, the same contemplated subjectively, or as existing only in the mind, is an Idea. *Quod in natura naturata Lex, in natura naturante Idea dicitur.*"

The doctrine of Aristotle and the Peripatetics generally was expressed in a similar manner, as that of *universalia in re.* They adopted the Aristotelic distinction between Material and Formal Cause, or, more generally, between Matter and Form; as, for instance, between the marble and the special shape which makes this marble to be a statue of Hercules, or a Dancing Faun. The Peripatetics held that every individual object consists of Matter and Form, the former being special or peculiar to it, the latter being common to it with its whole class. The Forms do not exist separately, but are, so to speak, immersed in Matter. Matter can exist without Form, as in chaos, before the Divine Architect fashioned the Cosmos or universe; but as Form must be of some Matter, Aristotle rejected the Platonic doctrine of preëxistent Ideas. Still, these universal forms are not, as the Conceptualists taught, mere conceptions of the mind, formed through a comparison of particulars. They are real, and the proper business of science is to discern and compare them, thus arriving at general truths, — a mere acquaintance with particular objects not meriting the name of science.

With the Scholastics, the technical word Form always has an active sense. It means *that which forms,* and thereby acts; and we find this meaning generally adopted also in the "Novum Organon," and throughout Lord Bacon's other works. "A Substantial Form" is the inherent and permanent principle of action which makes any one substance, or class of substances, such as water or iron, to be the particular substance which it is, or which imparts to it its distinctive and essential attributes as such. Assuming, as our modern physicists seem to do universally, the primitive atoms, which are the ultimate elements of all material things, to be identical with each other in nature and essence, these atoms represent the "Matter" of the Peripatetics; the Germans would call it *Urstoff.* Then a "Substantial Form" would be the force, or agency, which brings together a group of such atoms, and imparts to them the distinctive properties of carbon, iron, or hydrogen.

The Nominalists, immediately on their appearance as a sect in the eleventh century, were involved in a charge of heresy. They

seemed to attack the orthodox doctrine of the Trinity, arguing that, if the essence of the Godhead might be spoken of as one reality, the distinction of three Persons would be lost. They charged their opponents with Sabellianism, that is, with maintaining that the three are merely so many different aspects of the one. The Realists retorted by accusing them of Tritheism, — of making the unity merely nominal, by teaching that real oneness of substance was incompatible with distinction of Persons. We need not enter here into the particulars of such a controversy. I have alluded to it only in order to explain how the discussion became so hot, and so prominent and absorbing. In these modern days, of course, the question is one of mere science, the answer to it intimately affecting our notions of the essential character of classification, the nature and uses of language, and our power of thought and capacity of really knowing anything more than individual objects and events.

The Nominalists say there is nothing universal but names; that we invent names for such groups or classes of things as we find it convenient to put together; that a talent for reasoning consists in a skilful use of language; and hence, that Logic is entirely conversant with language. Ratiocination, says Hobbes, is computation; it is the addition or subtraction of names. Hence the truth and falsity of general propositions belong to speech, and not to things. There is a standard of truth or falsehood for singular propositions about individual things; for I may say "this bit of iron is soft," when in fact it is hard; but there is no such standard for the universal proposition "*All* iron is hard," as it is merely conventional — a matter of agreement among men — what things shall be called iron, or shall be put into the class to which that name is given. Classification and naming being arbitrary, there being many different systems of classification, and different languages or sets of names, the truth or falsity of general propositions is also arbitrary.

Each of the three systems, Realism, Nominalism, and Conceptualism, has already been said to contain some aspect or portion of the truth, neither being wholly right or wholly wrong. It may now be added, in respect to the doctrine just indicated, that Realism is right and Nominalism is wrong. Science is not mere naming; classification is not wholly arbitrary; truth is not mere truth of words. God created each thing after its own kind; that is, he created the kinds or classes, marking them off from each other by essential and ineffaceable distinctions. Species and genera exist in

nature, whether we are able to find them there or not. We are not able to decipher all of God's plan of creation. We often make great mistakes in endeavoring to conform our systems of classification to nature's systems. And even when this endeavor is most successful, we may be often puzzled to tell where the boundary is placed, where one species ends and another begins. Plant-animals, as Leibnitz calls them, — sponges, for instance, — may be plants or animals, we don't know which. But the typical plant is radically, essentially, different from the typical animal, the difference between them being established by God and nature. In like manner, man is man, and not a brute, the two kinds being created distinct. Perhaps it is a mystical use of language to say, as the Realists did, that all the individuals in any one class share or participate in one common nature; for what is numerically one and indivisible cannot be shared by many. But interpret such language with a reasonable allowance for metaphor, and it expresses fairly enough a great truth. On this point, I hold with Agassiz, and not with Darwin. And when we pass out of physics and natural history, this one aspect of truth, which Realism has seized, seems to me to be at once more evident and more vital. Justice, veracity, purity, benevolence, are something more than mere names. Actions are not arbitrarily classified, when they are put under these heads or their opposites. Here, surely, God's law and the law of our own consciences have created real and essential distinctions, which we cannot overlook.

And yet there is a large share of truth in the doctrine of Nominalism. We often use words as substitutes for thoughts; such a mental process is frequent, legitimate, and highly useful. We reason, going through long processes of argumentation, by the use only of words or other mere symbols, or by means of one particular individual of the class, which we consider as representative of the rest; and in considering this specimen, we confine our attention to those attributes which it has in common with the class, leaving out of view what is peculiar to it as an individual. In Geometry, we reason in the latter fashion, making the one triangle or circle drawn on paper or the blackboard, or in the mind's eye, a representative of all possible circles and triangles. In Algebra, we employ the former process, and conduct very long and intricate trains of reasoning by mere letters and other symbols, — strange hieroglyphics they are to the uninitiated eye, — and never once think of the meaning or interpretation of one of these symbols, till we reach the final formula that expresses the desired result. To repeat what I

have said elsewhere: Having once satisfied ourselves, by spreading out in thought all the attributes which are combined in any concept, — or, to be still more careful, by having once called up in imagination a picture of some one individual possessing all these attributes, and therefore contained in the class, — that the meaning of the word, which is the sign of that concept and the common name of that class, is within our power, we proceed to use that word *symbolically*, — that is, as a mere sign, and therefore with much more ease and rapidity than if it were necessary to stop, each time it recurs, and repeat the process of verifying its meaning. Hence, it may be said that the use of language gives us the power of thinking in short-hand; words are stenographic thoughts. Moreover, this abbreviated expression of thought is a great help to the memory. Having once ascertained by reflection the relation of various concepts to each other, — that is, having formed judgments and reasonings, and expressed them in propositions, — it is a far easier and shorter method to remember the few words which constitute such a proposition, than to recall successively each of the mental processes which are now embodied in it, and through which it was first obtained. Language is thus the great repository of thought, not only in books, but in our own minds.

Having shown that there is at least some truth both in Realism and Nominalism, I now proceed to do as much for Conceptualism, the whole theory or system of which seems to me perfectly well-founded, the admissions already made in favor of the other two theories not being contradictory of it, but only additions to it, being needed to make up a full view of the whole subject. The principal, indeed the only, argument of the Nominalists against Conceptualism is the assumed impossibility of presenting an abstract *general* idea to the mind, because such an idea must possess contradictory attributes. There may be, they say, an individual concrete idea of particular men, as John, Thomas, or William; and of particular triangles, as of a right-angled one, enclosing three square inches, or three acres, or an isosceles one of some definite area. But they insist that there cannot be an abstract idea of "Man" in general, because such an idea must be, at once, of a tall and a short man, a black and a white man, fat and thin, clothed and naked. One idea cannot present all these contradictory attributes; what we call such an idea can be only a mere word, *man*, or a particular image of John or William, taken as a specimen or representative of the whole class of men. They reason in the same way against the possibility of a general idea of triangle, or anything else.

Now, I have admitted that we cannot have imagination ++ *i. e.*, form a definite picture in the mind's eye — of man, triangle, or the like; but I maintain that we can think or conceive it. First, can we ever *think* what we cannot *imagine?* Yes, unquestionably. We can think a relation or ratio, though this conception is absolutely unimaginable — unpicturable. Take the simplest of all relations, similarity, and difference or contrariety. You certainly cannot imagine either, though you can imagine similar objects. But the similarity is not *in* either object taken separately, and therefore is not perceived by sense, but is apprehended by the mind as existing *between* the objects. Look at John separately; you see no similarity. Look at William separately; again, you see no similarity. Now look at John and William together, as standing side by side; and *you say*, you now *see* the similarity of one to the other, in that they both have the common features of human beings. But I maintain that you do not literally *see* this similarity, but only apprehend or conceive it in pure thought. For is it not evident, that you do not actually *see* any more in either one of them, now that they stand side by side, than you did a minute ago, when you saw each separately? Surely, then, similarity, or any other relation between two or more objects, is not perceptible by the senses, but is apprehended or conceived by an act of pure thought. "Qualities," says Adam Smith, "are almost always the objects of our external senses; relations never are." Moreover, what is not presentable to sense cannot be pictured by the imagination; since the only function of the imagination is to reproduce impressions made on the senses. Hence, similarity as such, distinguished from similar objects, cannot be imagined, but can only be conceived, or thought.

This argument is as old as Plato, from whose "Theætetus" I borrow this illustration of it. If, he says, by the side of six dice we put four other dice, we say that the six are *more*, are *half as large again*, as the others; but if we put twelve by the side of them, then we say that the six are *fewer*, are *only half* of the others. But to the senses, the six dice have remained all the time unaltered and equal to themselves. Having been neither increased nor diminished, how can they, from *more*, have become *fewer*, or, from *half as large again*, have become only *half as many*, if the intellect, or pure thought, did not apprehend something in them which mere sense cannot perceive, nor imagination represent?

Again, still borrowing from Plato's "Theætetus," we say there are some matters which the mind apprehends through itself, and others which it perceives only through the bodily organs. We do

not perceive white and black *with* the eyes, or shrill and grave *with* the ears, but *we* see the former *through* our eyes, and *we* hear the latter *through* our ears. All sensible perceptions must surely converge towards some one common centre, (call it mind, or soul, or what you please,) which perceives through them as its instruments. The various percepts of sight, hearing, touch, etc., have each its own special bodily organ or instrument, *through* which the mind receives them. But no one of them can be received through the organ appropriate to another; we cannot hear with our eyes, or see with our ears. Then, whatever we conceive or judge respecting *any two of them*, cannot be performed through the organ *special to either*. If we conceive any thing common both to sound and color, we cannot conceive it either through the auditory, or the visual, nerve. Now, there are judgments common to the two; namely, of their number, existence, likeness or unlikeness, degrees of beauty or deformity, greater or less aptitude to give pleasure or pain, and countless other relations. All these are cognizable by mind or thought, but are not perceptible through sense, or picturable through imagination.

In music, what is merely sensuous is the quality of the note, or the difference perceived by the ear when a note of the same pitch is sounded on a violin, a flute, or a clarionet, and the pitch, according as it is acute or grave. But music, properly so called, consists not at all in this mere quality or pitch of the notes, but in the harmony and the melody, the apprehension of which is purely intellectual, since it is an apprehension of the *relations between* the notes, whether simultaneous, as in harmony, or successive, as in melody. Hence, music cannot be written or expressed to the eye, except by a system of purely arbitrary and conventional notation. Even the application of the epithets high and low, which is the basis of our present system of notation, is arbitrary; and there is some reason to believe that their use was reversed by the ancients, — that they called the acute sound low, and the grave one high. At any rate, music is not the mere *perception* of high and low, but the purely intellectual cognition of musical intervals, — that is, of the distance between two simultaneous notes, and of the melodious arrangement of successive notes. Sounds in themselves harsh and unpleasant may still give some pleasure, if thus skilfully arranged and combined.

I now proceed to prove, that the relation or ratio, which is thus *thought*, is not a *particular*, but always a *general* idea, being always common to an indefinite number of related objects or ideas.

And here I am sorry to differ, not only from Dugald Stewart, John S. Mill, and all other Nominalists, but even from Sir W. Hamilton, who, very inconsistently, as it seems to me, with other portions of his philosophy, argues stoutly, in opposition to Dr. Thomas Brown, that the relation apprehended between any two objects or ideas is always a particular relation, special to that one case, and only similar, at most, to a relation apprehended in some other case. On the contrary, I hold, with Dr. Brown, that a relation is always apprehended as general, or common to an indefinite number, if not of actual, at least of conceivable or imaginable, cases. For instance, take the mathematical relation, which is called *ratio*. Consider the ratio of 2 to 4, of 6 to 12, of 9 to 18, etc.; we do not say or think that the ratio in the first of these cases is merely similar to that in the second; but we know it is the same; the ratio is just $\frac{1}{2}$, neither more nor less, in all the cases cited, and in an indefinite number of others. Take the proportion, $a : b :: c : d$; here, we do not say the ratio of a to b is similar to that of c to d, but it is equal — it is the same ratio: the quantities are different, the ratio is the same. Take next the relation of equality: there can be but one measure of absolute equality; and that is general, or common to an infinite number of conceivable equations; if $x = a$, then $2x = 2a$, $x^2 = a^2$, and so on indefinitely. We say the like of identity; for the very idea of identity is one and the same. True, to recur to a former instance, there are many different degrees of similarity; yet no one of them is particular. Any one measure or degree of similarity, though apprehended as actual in but one case, may be conceived as common to an infinite number of imaginable cases. It seems to me, this argument amounts to a demonstration of the possibility of abstract general ideas.

Individuals belong to, and are limited by, space and time; they cannot even be imagined out of some particular space and time. "This man" belongs here and now; "that man" belongs there and then. You cannot even imagine any particular thing out of its own place and moment. Hence, space and time are properly regarded as *principia individuationis* — the elements, principles, and means of individualizing objects. But the Universal — Man, in general — is emancipated from any particular time and space; he belongs nowhere in particular, and to no particular date. European, Asiatic, African, American, is equally Man; the hero of the first, the third, the tenth, the present, century, is equally Man. And for this reason, even if for no other, relations and attributes,

taken abstractly, are general ideas, Concepts, Universals. The similarity or contrast of two things may be observed anywhere, and at any time. So, also, this particular shade of red, this definite degree of hardness or softness.

Apart from argument, however, I think the theory which we are now combating is evidently extravagant and incredible. The Nominalist would have us believe, that, in reading a book or in hearing a lecture, wherein no proper names are introduced, and such are plainly of very infrequent occurrence, the mind of the reader or hearer has nothing before it, from beginning to end, except mere words, — that is, imagination of a succession of sounds, or of combinations of letters as they appear to the eye ; except that, from time to time, we arrest this succession of mere symbols or signs, which, on his hypothesis, are symbols without archetypes, signs without anything signified, and call up in mind an imagination of an individual, and consider this as a specimen or representative of the whole class which the word denotes. For instance : in saying " The proper study of mankind is man," we think these words, " The proper study of mankind is man," neither more nor less ; except that, when we wish to be very accurate, we call up an image of some one man in an attitude of deep thought or study of some particular crowd of men, which crowd, also, we consider for the moment as representing a much larger crowd, all men, humanity itself. Still farther, on this theory, we particularize the word " proper " by an image of some one man doing one thing which he ought to do, which is fit or becoming in him, by contrasting this with an image of some other man doing what he ought not to do, and thus come to an accurate knowledge of what the word " proper " signifies. Now the imagination can reproduce only definite combinations of lines, shapes, colors, smells, sounds, and tastes. Pray what combination of such elements, — what shape, color, sound, etc., does represent the meaning of the words *ought*, *fit*, *becoming*, — or the metaphysical ideas of time, space, cause, substance, infinity, and the like? Why, in making any individual a specimen or representative of its class, we are obliged to think a relation — the relation, namely, of that one to its class ; and as I have shown, a relation is unimaginable, cannot be pictorially represented, but can only be thought. And that relation is general ; for all the individuals in the class bear the same relation to the concept or class-notion. Surely, the most extravagant of all philosophical theories is that doctrine, first taught on English ground by Hobbes, and since too much favored by J. S. Mill and

other Positivists and ultra Nominalists, that all our knowledge begins with particulars, and is derived from mere sensations, so that, to quote Hobbes's own language, "there is no conception in a man's mind, which hath not at first, totally or by parts, been begotten upon the organs of sense;" and "a man can have no thought representing anything not subject to sense." We might quote against him his own pithy aphorism, — "Words are wise men's counters; they do but reckon by them; but they are the money of fools."

CHAPTER IX.

Berkeleyanism.

Perhaps the only fruitful and important truth in Psychology which we may fairly claim to have been first *discovered* in these modern times, and, as universally accepted both by physicists and metaphysicians, to be now established beyond all doubt or question, is that contained in Bishop Berkeley's "New Theory of Vision," first published in 1709, when its author was only twenty-five years old. The germs of it were certainly to be found in the metaphysical speculations of Malebranche, especially in the first book of the "Search after Truth," and in a brief paragraph of Locke's "Essay on Human Understanding." But these were mere hints, the full bearing and significance of which were not even suspected by those who made them. Consequently, their priority of publication no more lessens the merit of Berkeley's grand discovery, than the shrewd anticipations of the true theory of gravity by Kepler, Huyghens, and Hooke detract from the glory of Newton in first tracing out that theory to its farthest consequences, and verifying it by mathematical proofs, in his immortal "Principia." When first published, Berkeley's doctrine appeared so novel and improbable that it was regarded as a paradox, or a sort of philosophical romance. But it is now formally taught even in elementary treatises on optics, and is adopted into every scientific creed; though few persons take the trouble to put the several portions of it together, so as to be able to contemplate its results in the aggregate, or as one whole.

Yet the doctrine may be easily summed up in one short statement. Berkeley proved, that there is no resemblance whatever between the *visible* and the *tangible* qualities of material things; that colors are the only objects of sight, while the distances, figures, and magnitudes of external objects are not seen, but only inferred, or estimated, from qualities which are really visible, — that is, from variations of color, and from a gradation of tints and of light and shade. Prior to experience, without the aid of the other

senses, our eyes could not inform us that anything existed out of ourselves. We do not *see* the outward world. The visible landscape exists only in imagination, being constructed or put together there by the intellect, out of materials furnished to the memory by the sense of touch, and by experience of resistance to muscular motion. The mind invests the colors and gradations of light and shade, which are all that are actually seen, with the various modifications of size, shape, and position, disposes them at appropriate distances, and literally

> "gives to airy nothing
> A local habitation and a name."

At no period of life do we gain, by one step, so great an accession of knowledge, as when, in infancy, we *learn to see*, — a process of education just as necessary, as gradually acquired, and as clearly the result of experience, as that whereby we *learn to walk*.

Perceptions by the other senses, also, are frequently altered and enlarged by the judgment and imagination; though the process of thus enlarging them, through long habit, is made so quick and easy that we do not remember it. All the information is then attributed directly to the sense, though, in fact, it is a joint result, (1) of perception by sense, (2) of remembered experience, and (3) of reasoning. Thus, we speak of hearing a bell, the crying of a child, or the rattling of a cart in the street. In truth, we hear only certain sounds, at first unmeaning, but which experience has now enabled us to recognize as proceeding from those causes. Without such experience, we certainly could not tell even the direction whence the sounds came; for direction also is, not a direct perception, but an inference, based chiefly on the sound being a little more distinct to one ear than the other.

Returning to vision, it is plain that the utmost which we could expect to see of any object is its length and breadth. We must *infer* the thickness from slight differences of shading, or deepened tints. Hence, when this shading and tinting are skilfully imitated by an artist, we are deceived, and think that the visible object is a sphere, when in truth it is only a flat disc, or other plain surface. In such cases, we usually say that the eye deceives us. But it is not so; for the eye tells us only that there is a certain shading and tinting; and this is true. But *the mind* rashly judges that this variety of shade and tint is produced, *as it usually is*, by the sphericity or thickness of the object; whereas, in this case, it was produced by a skilful artist.

In a similar way we can explain the phenomena of the stereo-

scope, which have led some superficial thinkers to believe that Berkeley's theory is thereby disproved. On the contrary, it is thereby demonstrated. Because the two eyes in a man's head are two or three inches apart, some persons seem to think that our vision is like the Irishman's gun, which was so constructed, he said, that it would shoot round a corner. But they are wrong; for the vision of either eye can no more be deflected from a straight line than a bullet fired from a gun. But when a solid object is held quite near the face, the right eye sees a little more than its fellow does of the right side of that object, and the left eye a little more of the left side; that is, the two eyes see two surface-sections of the object, which do not exactly coincide, because seen from slightly different points of view. The mind, enlightened by knowledge previously gained from tactual experience, uses the slight difference now explained as one means of distinguishing solid objects from flat surfaces; and whenever the object seen by the right eye differs a little from the same as seen by the left eye, it infers or judges that the object is solid. And usually this judgment is correct. But the stereoscope is a means of deceiving it; for in this instrument, two pictures, *both on flat surfaces*, are presented, — the one a picture of what the right eye usually sees, and the other a corresponding picture for the left eye. These two flat pictures being both presented at once, and at the proper distance, the mind wrongly infers that they are only two presentations of one and the same solid.

The general principle is, that what is called an illusion of sense, though it is really an illusion of the judgment, always arises whenever one and the same effect may be produced on a sense-organ, such as the retina, by two totally different causes or combinations of circumstances, the one of which is of very frequent, and the other of very infrequent, occurrence. The mind, having no immediate means of determining which of these two causes is at work, since the sensation produced is precisely the same in both cases, always refers this sensation to the well-known cause, — that is, to the one which usually operates; and therefore the judgment is mistaken, or in other words, an illusion arises, as often as the phenomenon is produced by the second, or infrequently operating, circumstance. Thus, faintness of coloring and indistinctness of outline are ordinarily produced by the great distance of the object seen; but they may also be caused by a mist or fog; and when this is the case, we are deluded into an immense exaggeration of both the distance and the magnitude of the object.

As thickness or solidity, then, is not directly seen, so neither is distance, nor magnitude. The distance of any object from the observer being a line directed endwise to his eye, it must make the same impression on the retina whether the line be longer or shorter. We *infer* the distance from the distinctness or faintness with which the colors are seen, from the relative position of the object to other objects whose distances are already known, from the muscular sensations attendant on the axes of vision of the two eyes being inclined to an angle with each other or kept sensibly parallel, and from other circumstances, all of which are mere *signs*, the distance of the object being the *thing signified*, or inferred from the presence of the sign. In the case of near and familiar objects, as the estimate is frequently made, it is usually very accurate. But as the object is more remote, the judgment becomes uncertain; and great distances, such as those of the fixed stars, we do not even attempt to estimate. If, when travelling on an unfamiliar road by night, I see a light before me appearing only as a fixed luminous point, I cannot tell whether it is a few feet, or a few miles, distant; whether it be not even a star on the edge of the horizon.

But if distances are not seen, so neither are magnitudes, since the visible magnitude evidently depends on the supposed distance. Since the real sphere of our vision is always equally large, or contains an equal number of visible points, every visible object, which covers from the eye any other visible object, must, to the eye alone, appear as large as that other object. Thus, before experience got by locomotion, a man's thumb, which, placed just before his eye, might hide a church, must equal that church in size; or his hand, which might cover up his sight of the firmament, must be as large as that firmament. But the mind, instructed by experience and science, projects off that firmament so far, that, as its magnitude must increase in proportion to the distance, or rather to the square of the distance, it swells in our conception to immensity. But immense as it is, we may still see the whole of it reflected in a teacup full of water; and then, though certainly bounded by the rim of that little cup, it still seems to us as large and as distant as ever.

"If," says Adam Smith, "you shut one eye, and hold immediately before the other a small circle of plain glass, not more than half an inch in diameter, you may see through that little circle the most extensive prospect, — green fields, and woods, and arms of the sea, and distant mountains. But the visible picture which represents this vast prospect cannot be greater than the little circle

through which you see them. If you could conceive a fairy hand and a fairy pencil to come between your eye and the glass, that pencil could delineate upon that little glass the outlines and colors of all those fields, woods, and mountains, *in the full and exact dimensions in which your eye really sees them.*"

Common facts show the necessity of experience and judgment, before we can obtain correct notions by vision alone. Thus, we are not so much accustomed to see objects distant from us in a vertical line, as in a horizontal one. Hence, the same visible object, if placed directly below or above us, will not by any means suggest the same magnitude as when seen at an equal distance on a level with the eye. Look down from the interior of the cupola of St. Peter's at Rome upon the floor of the church immediately below, a depth of some four hundred feet, and the men and women walking about on that floor appear no larger than flies or ants. But look at the same persons from the doors at the lower end of the nave, also a distance of some four hundred feet, and then, the spectator and the objects being on the same level, the latter appear as large as life.

It is often objected, however, that the image formed on the retina, at least, is *directly seen ;* and as this image has sensible magnitude, form, and a relative position of its parts perfectly corresponding to its archetype, that we do in fact *see* magnitude, shape, and relative position. The answer is, *we do not see* even the image on the retina, since this would require another eye, behind the retina, with which to see the image ; and then a third eye, still farther back, to see the image on the retina of the second eye ; and so on to infinity. Moreover, the image is inverted, has its right and left sides transposed, and is double, being formed on the retina of either eye; whereas the object seen is upright, single, and without transposition of its sides. Again, that a visible image should be transmitted, in the darkness within the skull, through the optic nerve and the substance of the brain, to the presence-chamber of the mind, wherever that may be, is an unmeaning and absurd supposition.

And now, thickness or solidity, distance, magnitude, and position being thus eliminated, because they are not seen, but only inferred and imagined, it is obvious that the visible world is already reduced to very little. It seems to consist only of color, and this is seen only as if in contact with the eye, and not as spread out over a surface. But even this concession is too much ; strictly speaking, the colors seen do not belong to the external

world, but exist only in the mind. They are merely effects produced *in us* by some occult causes existing *out of us*. And these effects do not even resemble their causes, — any more than vibrations of the air, or of the tympanum of the ear, resemble the sensation of sound; any more than the pleasant feeling of warmth resembles that molecular motion or agitation, which chemists term heat or caloric; any more than the pain which follows the prick of a pin resembles the pin or the puncture which produces it; or to take a case more directly in point, any more than the flash of light seen resembles the heavy blow on the back of the head which caused it to be seen. Sensations, feelings, pains, pleasures, exist only in a sentient mind, and depend, for their nature and degree, exclusively on the constitution of the nervous organism within which that mind is lodged, the various parts of that organism being roused each to its own peculiar activity by contact with external stimuli. Aristotle first observed, what modern physiology has amply confirmed, that all the senses are only modifications of the sense of touch. Let anything touch, and so agitate, the olfactory nerve, and the sensation of smell follows; touch the palate, and we have the sensation of taste; touch almost any part of the body with ice, and we feel a chill. Just so, when the undulations of the ether reach the retina, we see light, either white or colored. But the sensation produced is never an image or resemblance of that which causes it. Sugar is not like sweetness, a chill is not like ice, a vibration or undulation is not like sound or color; any more than nausea is like tartar emetic. All the "secondary qualities" of body, as they are called, such as sounds, tastes, smells, colors, and the many and various sensations of touch proper, or mere contact with the skin or mucous membrane, are purely subjective, — mere feelings or sensations in the mind; and as Berkeley remarked, nothing in the world can be like a sensation or idea, except another sensation or idea.

We may accept, then, as demonstrated, Berkeley's conclusion in his own words; that, to a man born blind, and afterwards restored to sight, "the sun and stars, the remotest objects as well as the nearest, would all seem to be in his eye, or rather in his mind." And I may add that the experiments of oculists in couching those born blind, made since Berkeley published his Theory, have amply verified this conclusion.

This account of vision does not shake our confidence in the knowledge apparently obtained from sight. It merely traces this knowledge to its proper source, showing that it is not direct, but

mediate or inferential. The process is not so mechanical as it seems. The eye alone cannot perform the work. The agency of mind must be added to the opening of the eyelids, before the scene enters. To recur to a former illustration, we are apt to think that the ideas acquired by looking at a page of print are received by sight: when, in truth, nothing is seen by the eye but many black strokes on white paper, not one of which has any natural affinity or resemblance to the sound or the idea which it represents. Now the outward visible world is a book, and the first one in which the infant learns to spell. There is no more a natural or necessary connection between visible and tangible ideas, between varieties of light, shade, and color, and the figures, distances, and positions suggested by them, than there is between the written or spoken word "man," and the rational biped without feathers whom it designates. The particles or undulations impinging upon the retina of one opening his eyes for the first time are mere words in an unknown tongue. The mind, taught by experience, projects them off, invests them with significance, makes them messengers and interpreters between the outward world and itself, and learns from them more in a moment than years could convey by the slow steps of the original process. If man had only the sense of touch, how long would he be applying his hands successively to every part, before he could form a notion of the front of a great cathedral, with all its minute tracery and multitude of details? Yet in a moment, in the twinkling of an eye, the mind receives the sensations of various colors, infers the magnitudes, figures, positions, and distances signified by these sensations, and pictures to itself as external that complex whole, with every "jutty, frieze, buttress, and coigne of vantage." And we need not wonder that these many inferences are made without our noticing or remembering them, when we consider how quick is the action of mind if long habit has made the process easy and familiar. How rapidly, for instance, does the practised eye run over a printed page, many letters, and even words, not being actually perceived, but supplied by the judgment from the context. Remember that at least three acts of the mind are needed for every letter: first, that the letter itself must be recognized and distinguished from every other letter; secondly, that the sound must be remembered of which it is a symbol; and thirdly, that the idea must be recalled which this sound represents. And after all, these separate ideas must be framed together into propositions, and the whole arranged and judged as one piece of reasoning, narrative, or description.

Yet the eye and mind together run over such a page, containing perhaps two thousand letters, in less than a minute. What wonder, then, that the contents of nature's book, which we have been studying every hour since our birth, should be mastered with so much ease and quickness?

Berkeley was led to doubt the existence of matter by the same train of thought which is expressed in his theory of vision. If the visible world is a phantasm, and exists only in the mind, what better evidence of reality has the tangible world? In truth, there is but one of the five senses, of which it can be alleged with any show of reason, that it bears testimony to the objective outward existence of material things. Sight, as we have now proved, primarily tells us *nothing*; and the same may be said of hearing, smell, and taste; for sounds, odors, and tastes also are mere sensations, or effects produced on the mind. We take cognizance of these effects; but of their causes, the only things which are supposed to exist externally, and which bear no resemblance to their effects, we know little or nothing; and it is vain even to inquire, till we can assign some reason why one nerve, when touched or agitated, gives us a sensation of color, and another, similarly affected, a sensation of smell, and a third, when shaken, gives sound. Why does an orange taste sweet, and a lemon sour? Why does a drum sound hollow, and glass shrill? We do not know. We can only say, that we are so constituted as to be thus affected; we cannot tell how that is constituted which so affects us. The nature of the effect produced depends vastly more on the constitution of the thing acted upon, than on that of the thing acting. Thus, wax melts in the fire, clay contracts and hardens, water evaporates, powder explodes. Here, one and the same agent, fire or heat, produces a great variety of effects, depending on the nature of the thing exposed to its influence. Then, what can such various effects as sensations are, teach us as to the nature of the cause which produces them?

Strictly speaking, there is no *sound* in the outward universe, but only a vibration of the air or some other substance, which would never become audible, if there were not a hearing ear and a percipient mind to receive it. So, also, there is no *smell* in the material world, but only, as is supposed, particles of effluvia floating in the atmosphere, which, when they come in contact with the nose, excite in the mind the sensation of odor. The assertion may appear strange, but a moment's reflection will satisfy any one of its truth, that, if there were no mind in the universe to be affected by

it, the world of matter would be absolutely dead, silent, colorless, dark, inodorous, and tasteless. What sort of a material world is it, then, which you contend for?

Conceive or imagine, if you can, such a universe, thus stripped of all secondary qualities, and you will then have an idea of Matter pure and simple, or as it is supposed to exist *per se*, in itself, absolutely, independent of the action of mind, which invests it with supposititious and unreal qualities. What is Matter as thus conceived? It is simply what the physicists call "impenetrability" within certain limits of extension; that is, it is a certain length, breadth, and thickness, — say of this book, — which repels or prevents anything else from entering into its own limits. It is not merely the limited extension itself, together with the lines which form its limits or shape; for this alone is mere empty space, not filled or occupied with matter or anything else. But it is such limited extension made impenetrable, or so occupied that, unless pushed aside, or compelled to occupy another and equivalent portion of space, it resists the attempt of anything else, any other force or other matter, to enter into its own space. This resistance of impenetrability exists, or is known to exist, only at the surface; for, as Schelling remarks, so far as we know, matter has no interior, no inside. Cut it up as fine as you please, we still *know* only the surfaces either of the whole or of its fragments; for only at the surface is this force of resistance manifested. For aught we know, or ever can know, Matter is a mere hollow shell. And at the shell, at the surface, so far as we know, there is nothing but Force; namely, the Force of resistance.

But what is force? We know of none except the force of mind, exerted as will, witnessed by consciousness, and directed by intelligence. With a mental and conscious force, I push against the table; and, action and reaction being equal, the table pushes back against me, with a force equivalent to my own, and so far as I know, perfectly similar to my own. This force of resistance is perfectly uniform in its action, always subject to physical law, — that is, orderly and regular in its manifestations; and such, surely, are the characteristics of conscious and intelligent force. What is this force, or rather, whose is it, except the will and power of the infinite mind, here brought directly in contact, at the point of sense, with the will and power of my finite mind? These two forces are known with equal directness and immediacy, — not one after the other, or as an inference from that other; but both at once, and *per se*, or in themselves. In the consciousness of effort,

I become aware of myself, the Ego, as putting forth power or exerting energy; and, at the same moment, I become aware of something not myself, a Non-Ego, exerting an equivalent amount of energy in the opposite direction. One of these forces, my own, is, as I know, mental and conscious; what shadow of evidence is there that the other is not equally mental and conscious? Is it even reasonable to attribute this second force to the brute, inert, hard, senseless atoms, which are commonly supposed to exist, in some inconceivable manner, within that mere shell, which no man has ever penetrated, but which men choose to call Matter?

Analyze any *body* that you please, and you will find it to be nothing but various manifestations of force, one of which, the force of resistance with its several modifications, is cognized immediately or presentatively, and is therefore called a primary quality, or is supposed to exist whether your mind perceives it or not; while the others, the so-called secondary qualities, are only the supposed and occult causes of the known sensations, and are therefore only mediately known, being inferred from their effects, which are not even supposed to exist when no mind is present to experience them. What we call an apple, for instance, is only, 1st, when taken into your hands, a power, directly or immediately known, of preventing the fingers from closing into a small spherical portion of space; 2dly, an inferred or supposed power of raising in your mind the sensation of a rosy or russet color; (I say, this power, and the others which are to follow, are only *supposed* to exist *in the apple;* for aught you know, this sensation may be excited in you by the Infinite Mind only on occasion of the apple being so presented, and not in consequence of such presentation); 3dly, powers of exciting in your mind agreeable sensations of taste, smell, etc. If we admit the Principle of Causality, namely, that every sensation and every other event must have a cause, as an authoritative and necessary law of belief, then we must also admit the existence, *out of our minds*, of the various powers or causes which produce the sensations called secondary qualities. But whether we admit the Principle of Causality or not, the existence out of our minds of a force of resistance is directly and certainly known, for it is an immediate datum of consciousness. And this is enough to disprove the monstrous Egoistic Idealism, or Solipsismus, of Fichte, John S. Mill, and the Positivists, who, by denying both substance and cause, thereby deny the existence of any Non-Ego, and so, first, leave one percipient mind alone in the universe, and then, secondly, proceed to resolve this one mind into a mere group or series

of sensations, so that the final result of their theory is Nihilism. Very unlike this is the spiritualist philosophy of Berkeley, who expressly asserts the existence of a Non-Ego, that is, of other human minds and of the Infinite Mind, and only spiritualizes Matter by resolving it into a manifestation of Mind. I have merely to add, what is now the universal admission of the physicists themselves, that, in Matter as such, or as it is commonly conceived, no power, no causative force whatever, ever has been, or ever can be, discovered. It is nothing but a group of phenomenal effects; it never acts, but is only acted upon. This is merely a statement of the well-known mechanical law of inertia, that Matter is incapable of changing its state. It is brute, dead, and passive. If incapable of changing even its own state, *a fortiori* it cannot change the state of anything else.

Berkeley does not deny, but strongly affirms, the uniformity of nature and the universal reign of law; that is, that like antecedent phenomena will always be followed by like effects. And therefore he acted just like other men. He did not walk into the fire, or over a precipice, though he believed that both the one and the other existed only in idea. But he also believed, that the idea of walking into the fire would inevitably be followed by the idea of burning; and that a fall from a precipice would certainly result in painful sensations or ideas of broken bones. Therefore, like a prudent man, he ran no risks which he could possibly avoid of having unpleasant ideas forced upon him. Hence the essential shallowness and impertinence of those who attempt to reason against idealism as Dr. Johnson did, who as Boswell tells us, struck "his foot with mighty force against a large stone till he rebounded from it, saying, 'I refute it thus.'" Berkeley did not deny the idea of solidity, or the uniformity of the occasions on which it is manifested.

"That what I see, hear, and feel doth exist," says Berkeley, "that is to say, is perceived by me, I no more doubt than I do of my own being." But what are those things which I thus see, hear, and feel? They are sensible things; and sensible things cannot be like those which are insensible. Every thing which is in any way perceived by the senses is a real being on my principles; but not on yours. The Matter, which you contend for, is an unknown somewhat, without sensible qualities, but having a supposed occult power of raising ideas of those qualities in the mind of the beholder. It is you who doubt, or rather positively deny, sensible existences; I affirm them, and affirm that their essence or reality

consists in being perceived, — that is, in being sensible. Their *esse* is *percipi*. The world which is immediately present to my perceptive consciousness, and is therefore known to be as real as my own existence, is a bright and beautiful world, stained with all the colors of the rainbow, full of ringing sounds and sweet odors, exposed to perception as far as my range, or any body's else range, of vision, hearing, and touch extends; manifested in the same manner, under perfectly similar aspects, to my mind, and to every other mind. And *this* world, confessedly, exists only in idea or sensation, and is but the objective aspect of the beholder's own intellect. It is not, however, the creature of his imagination; it is not constructed by his will and fancy; it is not subject to his caprice. But it is orderly and permanent, subject in all its parts to that unchangeable will of God which we call "physical law." But the world of Matter, which you contend for, is not perceptible to sense; is not colored; is silent and cold; has neither smell nor taste, whether pleasant or unpleasant; and is known, or supposed to be known, by me only in that infinitesimal portion of it, which is in immediate contact with my own body. It is even an inconceivable world; for I cannot so much as imagine what would be the outward aspect of Matter when thus stripped of all its sensible qualities. The existence of a material world, then, is, at best, only an inference from what we actually perceive, and an unfounded inference. It is certainly not perceptible by sense.

The conclusion of the whole doctrine is, that Matter is nothing but Force; Force is nothing but Will; Will exists only as accompanied and directed by Intelligence and witnessed by Consciousness; and intelligent and conscious Will produces not only order, harmony, and law, but also infinite variety, diversity, and change. The purely mechanical result of mere brute, inert, and senseless Matter would be, not order, not variety, not life, but chaos, inaction, silence, and death. "I have no notion," Berkeley says, "of any action distinct from volition, neither can I conceive volition to be anywhere but in a spirit; therefore, when I speak of an active being, I am obliged to mean a spirit. . . . . I assert as well as you, that *since we are affected from without, we must allow powers to be without, in a being distinct from ourselves.* So far we are agreed. But then we differ as to the kind of this powerful being. I will have it to be spirit, you matter, or I know not what (I may add too, *you* know not what) third nature. Thus I prove it to be spirit. From the effects I see produced, I conclude there are actions; and because actions, volitions; and because there

are volitions, there must be a Will. Again, the things I perceive *must have an existence*, they or their archetypes, *out of my mind;* but being ideas, neither they nor their archetypes can exist otherwise than in an understanding. There is therefore an understanding. But Will and Understanding constitute in the strictest sense a Mind or Spirit." And this is precisely what Schopenhauer and Hartmann maintain, when they declare that *Wille und Vorstellung* constitute the essence of every phenomenon in nature, or that they are the principles of which the universe is the manifestation.

No one can affirm more distinctly and emphatically than Berkeley does the reality and permanence of all that we perceive as actually existing, including, of course, the uniformity and immutability of what we now call Physical Law. He says, all this is present to the mind in idea; and whatever is so present is, to him as well as to the vulgar, really existent and steadfast; nay, it is the very type of reality. In fact, the general result of his system is both to *idealize Matter*, and to *realize Ideas*. "You mistake me," he says; "I am not for changing things into ideas, but rather ideas into things; since those immediate objects of perception, which, according to you, are only appearances of things, I take to be the real things themselves. . . . . Nor are they empty or incomplete, otherwise than upon your supposition, that Matter is an essential part of all corporeal things. . . . . It is your opinion, that the ideas we perceive by our senses are not real things, but images or copies of them. Our knowledge, therefore, is no farther real than as our ideas are the true representations of those originals. But as these supposed originals are in themselves unknown, it is impossible to know how far our ideas resemble them at all. We cannot, therefore, be sure we have any real knowledge. . . . . The result of all which is, that we are thrown into the most hopeless and abandoned skepticism. Now give me leave to ask you, first, whether your referring ideas to certain absolutely existing unperceived substances, as their originals, be not the source of all this skepticism? Secondly, whether you are informed, either by sense or reason, of the existence of those unknown originals; and in case you are not, whether it be not absurd to suppose them?"

CHAPTER X.

Transition to Kant. — His Life and Character. — The Purpose of the "Critique of Pure Reason."

Under the influence of Descartes, French philosophy in the seventeenth century had been eminently spiritualistic, and confirmatory of the great truths of morality and religion. Even Spinoza, pantheist and infidel Jew as he was, must still be called a pure-minded mystic, who partially spiritualized matter by reducing it to an abstraction and identifying it with Deity. But a reaction began, and had already made considerable progress, even before Voltaire had imported from England the physics of Newton and the philosophy of Locke, both perverted to suit his own purposes. Theological bigotry and persecution, under Madame de Maintenon and Louis XIV., provoked fierce opposition, first, against the Jesuits and the Church, both identified with the State, and soon afterwards, against the religious faith which some unhappy agencies had perverted and dishonored. Despotic government, the corruption of morals in high places, and the oppression of the lower classes produced their last and worst results when they stimulated all the literary ability of France, in order to wage its war against the clergy and the other constituted authorities of the State, to shake the belief of the people in all that it had formerly held sacred. The philosophy of the eighteenth century, in France and Germany, and indeed through most of Europe, openly avowed infidel opinions, and, under the name of free thought, preached the doctrines of empiricism, skepticism, and immorality. Descartes was forgotten; Pascal and Malebranche were contemptuously pushed aside as dreamy fanatics; the doctrines of Leibnitz, though still taught in a pedantic form by Wolff, were obscured and perverted by those who could not, or would not, understand them. Bayle and Voltaire became lords of the ascendant; and their wit and vivacity made more proselytes than their arguments. Even Rousseau, who still preached a sort of sentimental deism, though he attacked all the institutions of society, and violated every principle of morality in

his own conduct, was still shocked by the excesses of Diderot, D'Holbach, and others, who made the Encyclopædia a battering ram against the altar and the throne.

Bolingbroke and Hume in England, Condillac, Helvetius, and Condorcet in France, were the professed authorities in speculative philosophy at this epoch, which, by a strange metaphor, was called the period of Illuminationism, — in German, the *Aufklärung* or Clearing-up, — the breaking away from old prejudices and the introduction of the light of unbelief. In a similar spirit of self-esteem, it called itself the Age of Reason. Condillac taught that all our ideas are only transformed sensations, and the chief feature of his work is an elaborate attempt to derive all our intellectual faculties from the operations of the external senses. This doctrine, with some of its consequences, is expressed in very unequivocal terms by Diderot. "In the last analysis," he says, "every idea is resolved into a representation or picture addressed to the senses; and since everything *in* our understanding has come to it through sensation, so everything *from* the understanding, which cannot re-attach itself to some sensible archetype, is chimerical and void of meaning. Hence, it is an important rule in philosophy, that every expression for which we cannot find an external and sensible object must be rejected as having no significance." Condillac endeavors to demonstrate his theory, by supposing a statue or automaton, fashioned internally like a man, but devoid at first of any impressions or cognitions whatever. He conceives one sense after another to be gradually awakened in this wooden or stone image, and aims to show how it might successively obtain all the knowledge and feelings which human beings actually possess. In perfect consistency with other portions of his doctrine, he calls men perfected animals, and the other brutes imperfect men. Helvetius, in conformity with his principles of fatalism and selfishness as the only springs of human conduct, makes the whole distinction between man and brute to consist in the superiority of the former in physical organization; so that, to adopt his own illustration, if the human wrist had terminated in a hoof, instead of a hand, man would still have been wandering in the forests as a wild animal.

These opinions, and the demoralization of society which they indicated and did much to enhance, produced their natural fruit in the excesses of the first French Revolution. It was meet that the Goddess of Reason, under the guise of a prostitute, should first be publicly worshipped during the Age of Terror, when the scaffold was daily streaming with the blood of the purest and noblest men

and women in France. I do not dwell upon these doctrines here, for since they amount to a rejection of all Philosophy, they are indirectly considered and refuted throughout the writings of the eminent men whom we have had, or shall have, occasion to consider. I allude to them here, only because their promulgation determined some of the leading features of the metaphysics of Kant, and, through him, of German philosophy during the first half of the present century. Kant's great work, the "Critique of Pure Reason," was an attempt to hold the balance even between the systems of empiricism and irrational dogmatism; — not so much to reveal the truth or falsehood which either might contain, as to rebuke the pretensions of both, by showing the insufficiency of the foundations on which they appeared to rest, and the groundless character of the assumptions whence they proceeded.

It is with diffidence and many misgivings that I undertake an analysis and exposition of the leading features of the philosophy of Kant. The difficulties of the task are great. It is hardly too much to say, that till within twenty years, not more than a dozen scholars, either in this country or in England, had fairly mastered the "Critique of Pure Reason" in all its parts, so as to be able to give an intelligible account and criticism of it in their own language, with such illustrations as should make the doctrine and the course of the argument plain to ordinary minds. A translation of it by Mr. Heywood was printed in 1838, and another and better one, by Mr. Meiklejohn, was published in 1855, in Bohn's Library; but for those who have any knowledge of German, if I may judge from my own experience, even this translation is far less intelligible than the original. The difficulties of the subject do not spring merely from the demerits of the style, though, for a great thinker, Kant was certainly one of the worst writers of German prose that ever published a book; and that is saying a great deal. One of his ill-compacted sentences, which sometimes extends over more than a single printed page, is ludicrously compared by Mr. De Quincey to an old-fashioned English family coach, such as was in use during the last century for transporting half a dozen persons a distance of one or two hundred miles. "Pretty nearly upon the model of such an old family coach, did Kant pack and stuff one of his regular sentences. Every thing that could ever be needed in the way of explanation, illustration, restraint, inference, by-clauses, or indirect comment, was to be crammed, according to this German philosopher's taste, into the front pockets, side pockets, or

rear pockets of the one original sentence. Hence it is, that a sentence will last in reading, whilst a man —

'Might reap an acre of his neighbor's corn.'"

But this, as I have hinted, was not the worst. Kant had a passion for the use of technical terms and formulas of expression, — phrases uncouth and barbarous, such as would have made Quintilian stare and gasp, most of them having been, in the application which he makes of them, invented by himself. In the abstruse portions of his subject, instead of stopping to explain or illustrate his meaning, he repeats over and over again, always in these stereotyped formulas, what he has already said, till the wearied reader begins to skip, and then loses the train of thought altogether. The subject of the work is one of vast compass and extreme intricacy, being no less than an attempt to analyze and map out, with great minuteness, all the powers and processes of the human intellect, through which it works in the attainment of knowledge. His aim is to show what is original, and what acquired, in the mechanism and furniture of the mind; how far it can go in the pursuit of truth, and why no farther; what are its grounds of assurance in the validity of its legitimate conclusions, and what are the illusions and fallacies with which it is inevitably beset, when it tries to push its researches beyond the unalterable limits of human thought.

The conception was a bold one, and even if carried out in the happiest manner, and under the most favorable auspices, it could be mastered in all its details only by patient meditation and persistent effort. But it was not happily carried out. Kant had a morbid predilection, not only for completeness, but for system and symmetry. In order to satisfy him, the whole inquiry must be conducted upon one principle, all the results must perfectly correspond with each other, no gaps must anywhere remain, every new fact observed or new truth discovered must find its appropriate place, and the entire work must thus constitute as perfect an organism as the human body, in which, according to Kant's own definition, all the parts are mutually ends and means. Most of the errors and superfluities of his system, as Schopenhauer has ably pointed out, have arisen from this morbid passion for system and completeness. He cannot accept a hint, an illustration, or an analogy from the kindred science of pure Logic, without pushing the parallel to its extreme limit, so that the correspondence shall be as perfect as that which exists between any visible object and its reflection in a mirror. Hence his table of just twelve Categories

of Pure Thought, subdivided into the four classes of Quantity, Quality, Relation, and Modality, each comprising three sub-species, of which the first two unite in order to form the third; — the whole scheme being a forced reproduction, or parallel, of the twelve possible forms of Pure Judgment. Hence, also, his three Ideas of Pure Reason, the Soul, the Universe, and God, not only corresponding with, but directly evolved from, the three forms of syllogism, — namely, the Categorical, the Hypothetical, and the Disjunctive.

In any other portion of the world, except in Germany, a metaphysical work thus conceived and executed would have fallen stillborn from the press. Even the labor-loving Germans were slow to penetrate its meaning and recognize its merits. Six years passed before it attained the honor of a second edition, the first having appeared in 1781. Yet Kant endeavored to facilitate the study of it by publishing, in 1783, his "Prolegomena for every Future System of Metaphysics," — a sort of brief compend, in a synthetical form, of the leading doctrines of his great work, and a fuller explication of its aim and purport. But he was ill-fitted to be his own commentator; and his system might have waited ten years longer for a general acknowledgment of its merits, had it not found at last two enthusiastic disciples, in Schütz, the philologist, who founded a journal in Jena, in 1785, for its explanation and defence; and in Reinhold, who, by a series of letters published in the "German Mercury" in 1786, rescued it from neglect and furnished hints enough to render it intelligible. Then, indeed, the learned world in Germany awoke from its apathy. Lectures were delivered upon the new philosophy in all the universities. Endless discussions ensued upon the application of its principles to theology, ethics, science, and literature, — to the whole field of human thought.

"This new philosophy," said Stäudlin, in 1794, "had an almost magical effect upon all the sciences, and found friends and disciples even among those who had never before devoted themselves to metaphysical studies. It awakened a spirit of philosophical inquiry in Germany of which the age had not formerly been deemed capable; and it contained so vast a treasure of new views and principles, that, as yet, but a small portion of them have been worked up; and only in a distant future can all the seeds of knowledge which it enfolds be fully developed." In the same year, Fichte remarked, "the Kantian philosophy is as yet only a grain of mustard seed; but it must soon become a tree which will overshadow

the human family. It will educate a new, nobler, and worthier race of men." Schiller exclaimed, in 1805, "the fundamental principles of the Critical Philosophy are a rich possession for ever, and on their account alone, one must deem himself happy that he has lived in this age." "More than any one before him," wrote William von Humboldt, "Kant has isolated philosophy in the depths of each man's consciousness; yet no one has made so many and fruitful applications of it to the whole territory of knowledge." "Measured by one test of power," says De Quincey, "viz., by the number of books written directly for or against himself, to say nothing of those which he has indirectly modified, there is no philosophical writer whatever, if we except Aristotle, who can pretend to approach Kant in the extent of the influence which he has exercised over the minds of men." And in foreign countries, I may add, such as France, England, and the United States, this influence has immensely increased during the last twenty years, — that is, over half a century since Kant's death.

These expressions may seem extravagant; yet it seems hardly possible to overestimate the influence of Kantian metaphysics upon the teachings of the schools and the opinions of men. I know of no parallel to it, except in the dominion of Aristotle over the speculations of all scholars and theologians throughout the Middle Ages, and indeed down to our own day. Tennemann re-wrote the whole history of philosophy from Kant's point of view. The rationalistic tendency of theology during the last three quarters of a century, the predominance of the critical spirit in the examination of the Scriptures, is attributable almost solely to his influence. He is the father of what is called modern free thought in science and religion; he has unsettled even more dogmas than he has established. The new systems of philosophy in Germany and elsewhere, which have eclipsed his in the fashion of the hour, and in popularity, are still built upon his foundations. Fichte, Schelling, Hegel, Herbart, Schleiermacher, and Schopenhauer, though they pushed their speculations to consequences which Kant never dreamed of, and from which, had he known them, he would have recoiled with aversion and disgust, still so far adopt his principles and method, appeal to his conclusions, and use his phraseology, that they are hardly intelligible except to those who have previously mastered the "Critique of Pure Reason." Kant, indeed, holds the key to all modern thought in Germany; his system, to adopt one of his own technicalities, is the necessary *propædeutik*, the indispensable preliminary information and discipline, for the acquisition of the later philosophy of

Germany, and even for a full understanding of the tendencies of thought in the philosophical schools throughout the world.

Out of Germany, it is true, owing to the intrinsic difficulties of the subject, till within the last twenty years, Kant's influence was but indirect, and his opinions were imperfectly known. It was common enough to have a smattering of the subject. Any one, who had a fair knowledge of German, could quote and criticize a few of the more prominent doctrines of the great Transcendentalist, taken out of connection with his system as a whole, and therefore generally misunderstood. Hence it was, that, misled by the term Transcendentalism, applied to his philosophy as a whole, and by his doctrine of the subjective character of space and time, the opinion became general, that his system was rather Platonic than Aristotelian, placing the essence of things and the characteristics of true knowledge in the realm of pure ideas and super-sensual intuitions of the truth, — the very region, according to his philosophy, of necessary illusions and abortive attempts of the intellect to overstep its natural boundaries. Only within the limits of experience, he constantly teaches, only within the dream-world of space and time, is any legitimate application of the Categories, any proper use of our faculties, possible. Even Coleridge and De Quincey, once held to be great authorities upon the subject, have been proved by Mr. Stirling to have mistaken, in this respect, the very elements of Kantian metaphysics.

Recently, however, much real progress has been made. Willm, Rémusat, and Michelet in France, Hamilton, Mansel, and Mahaffy in England, have supplied means for a fair knowledge and a critical appreciation of Kant's leading doctrines, even by those who are not able to study the subject in the original. Those who understand German may be referred with confidence to the third volume, published in 1860, of Kuno Fischer's "History of Modern Philosophy," the whole of which is devoted to the "Critique of Pure Reason." Though somewhat diffuse and pedantic in manner, the writer has the very rare gift among German professors of philosophy of making himself perfectly intelligible, and of adequately translating the technicalities of metaphysics into the language of common life without loss of meaning or precision. An English translation of this volume by Mr. J. P. Mahaffy has been recently published in London, and is very well executed.

Immanuel Kant was born of poor, but honest and pious, parents, in the Prussian city of Königsberg, April 22, 1724. His father was a saddler, of Scotch descent, who hoped that this, his fourth

child, might become a clergyman, and with that view, placed him in the Frederick's College at Königsberg, under the care of Dr. Schulz, a Professor of Theology, and the spiritual adviser of the boy's mother. "It was a strange fate," exclaims Kuno Fischer, "which caused the future leaders of the new philosophy to be committed for their education to the very influences of which, in mature life, they became the most decided opponents. Descartes was trained by the Jesuits, Spinoza by the Rabbis, and Kant by the Pietists." Rigorous principles of morality, and a stern sense of justice, were the only fruits which endured throughout life of Kant's severe education in the schools of an austere theology. A gentle boy, feeble in body and bashful in manners, and an insatiable reader and thinker, he seemed marked out for a life of meditation and study. Yet he was not sickly either in mind or body; and his very regular habits, and strict temperance in food and drink, gave him a long life entirely free from disease. He worked his way through the schools and the University with little aid from his parents, giving his attention at first to the classics, and afterwards to mathematics and physical science, for which he retained a great predilection throughout life. A respectable linguist, he wrote Latin with ease and correctness, and acquired some knowledge of English and French literature. His writings show a wide range of information and excellent taste in the choice of authors, though he certainly had but little appreciation of the merits of style. To satisfy his parents, he attended the lectures of the theological faculty, though with little profit; for he disliked the profession, and hoped to secure some inferior academic office, which would supply his few wants and enable him to prosecute his studies. In this hope he was disappointed; and soon after obtaining his degree, the death of his father having cut off his small resources at home, he was obliged to leave the University, and seek a meagre support for nine years as domestic tutor in private families. It seems that he always commanded the attachment and respect of his employers, though he confesses that he was but a poor teacher, his theory being much better than his practice. He had neither a commanding person, an attractive exterior, nor a fluent speech; and in spite of his long subsequent career as a Professor at the University, he seems never to have been very successful in imparting oral instruction. His pupils listened eagerly, for his fame was great; but if he lectured in no better style than he wrote, it is not probable that they carried away much with them.

In 1755, having published and defended a small treatise on the

principles of metaphysical cognition, he was admitted to exercise the modest function of a private lecturer, *Privat-docent*, in the University of Königsberg. The gains of such an office are small and precarious, depending on the number of pupils who may offer themselves; and of these Kant had but few. He lectured on logic, metaphysics, physics, and mathematics; and at a later period, on morals, anthropology, and physical geography. This wide range was taken probably to show the variety of his attainments, and to enable him to become a candidate for any professorship, in which a vacancy might chance to occur. His probation was a long one; for fifteen years he held this very humble post, the gains of which, even with the strictest economy, hardly gave him bread enough to eat. During the last four of these years, however, he was sub-librarian of the Royal Library, with the modest income of fifty dollars a year. Small as the salary was, it afforded at least a safeguard against starvation. At last, in 1770, at the ripe age of forty-six, Kant was appointed ordinary Professor of Logic and Metaphysics, the very post for which he had been an unsuccessful candidate twelve years before. Eleven years afterwards, that is, in 1781, he published his "Critique of Pure Reason;" and even then he had to wait six years longer, before the book and its author, then sixty-three years old, rose from obscurity, and he became by general consent the first metaphysician of his age. The concluding portions of his great work, the "Critique of Practical Reason," which contains his theory of ethics or moral science, and the "Critique of Judgment," which relates to the theory of taste and the idea of design, were published, the first in 1788, and the second in 1790. Several works of less magnitude, all occupied with the development and application of the principles of his system, the most noteworthy being his "Religion within the Limits of Mere Reason," a very rationalistic view of theology, appeared at various times before 1797, when, the infirmities of age having come upon him, he ceased either to lecture or to publish. He was never married; when young, he was too poor; and when at ease in his circumstances, he was too old and too fixed in his habits, to make such a change in his mode of life at all desirable. Though always healthy, during the last year or two of his life he became exceedingly feeble, and at last helpless and childish. Reduced to a mere skeleton, he dried up rather than died, on the 12th of February, 1804, in the eightieth year of his age.

Dislike of change, perfect self-dependence, and a rigid observance of the moral law, were the leading traits of his character.

His habits were so methodical, and his persistency of purpose so great, that he might be called a slave to routine. Poor as he was during far the larger portion of his life, he never incurred a debt, or accepted a favor which he had not richly earned. Having secured, after waiting for many tedious years, the great object of his life, a professorship of metaphysics in the university of his native town, he rejected all offers of removal or advancement. Calls to Jena, to Erlangen, to Halle, he declined. He was never out of his native province, never so much as one hundred miles from the place where he was born. His longest journeys, and these were short and very infrequent, were to neighboring country-houses. Till he was sixty-six years old, the narrowness of his circumstances compelled him to live in lodgings, and to dine at a *table d' hôte*. Then, having accumulated a modest independence by savings from income, he took a small private house, and every day entertained at dinner a few friends, never less than two, nor more than seven. Punctually at five o'clock in the morning, he was seated at his breakfast table, where he drank a single cup of tea, made a light repast, and smoked a pipe of tobacco, the only one which he allowed himself during the day. For fifteen years, he never failed to be in his lecture room at the appointed hour, never being so much as five minutes late. He lectured two or three hours each day, the rest of the forenoon being devoted to study or writing. At one precisely, he received his guests at dinner, all the arrangements at which were carried on like clockwork. The only subject to which he never voluntarily alluded in conversation, was his own system of philosophy.

As the first step towards understanding Kant, we must try to ascertain what that system of philosophy or mode of philosophizing is, which he stigmatizes as irrational dogmatism, and wherein it differs from the empiricism which inevitably leads to skepticism.

Dogmatism is a method rather than a system, so that the doctrines which are ranked under this head have little affinity with each other, except in the processes through which they are obtained, and in the reasonings by which they are supported. Descartes, Malebranche, Leibnitz, may all be termed dogmatists, because, in one manner or another, they seek to establish and confirm the conclusions of experience and the earliest convictions of intelligence by abstract reasoning, and by an appeal to the necessary and primitive truths which underlie all our knowledge, and which cannot be denied, they say, without falling into self-contradiction and absurdity. Dogmatism affirms, and seeks, by the use of the deduc-

tive method, to justify and demonstrate its affirmations. It affirms the being of a God, the existence and immortality of the soul, the reality of things out of our own minds, the freedom of the will, the certainty of human knowledge. It affirms that the intelligible world, of which Plato speaks, as seen by the light of pure ideas, may be clearly discerned by the enlightened and purified intellect, and that it may be regarded as the counterpart of the sensible world, the necessary relations of the former being the principles and ground of the observed facts of the latter. It assumes to penetrate beyond the world of phenomena to the world of realities, of things as they actually are, which lies behind. Man is capable, it maintains, of a spiritual discernment of the truth, and of purging away the illusions of the senses, because the human partakes of the divine intellect, and is enlightened and informed by innate ideas, — reminiscences, as Plato would have it, of knowledge obtained in a higher state of being, — by primitive and absolute convictions, which prove themselves, because they are the ground of all proof, and therefore cannot be doubted or denied, because that very doubt or denial takes them for granted.

On the other hand, empiricism, as its name imports, affirms that all our knowledge comes from experience, and is therefore subject to all the imperfections and limitations of experience. It is strictly limited to phenomena, to what appears, never extending to the ground of the appearance, or to what really is. We obtain our experience only through the senses, either through the external senses, by which we observe what is passing in the world without, or the internal sense, otherwise called reflection or consciousness, by which we observe what is going on within our own minds. Let me here observe once for all, since the remark clears up much that is otherwise ambiguous and liable to be misunderstood in the Critical Philosophy, that whenever Kant speaks of *Sinnlichkeit*, the faculty of sense, he means both these sources of knowledge, — both the bodily senses, and what he calls "the internal sense," though it is denominated by other writers "consciousness," and by John Locke, "reflection." I am conscious, says Kant, of an impression made on my mind, an impression which is *given to me* as a mental phenomenon, without any volition or agency of my own; and this he calls a sensible impression, whether it comes through one of the external organs of sense, such as the eye or ear, or from the notice which the mind takes of its own states and phenomena, such as pain, joy, or hatred. The notice which the mind takes of such a sensible impression, whether it be

a color or a sound, a pain or an anxiety, is an Intuition, and as such is strictly limited to what is here and now actually before the mind — in German, a *Vorstellung*, or placing before — a direct presentation of consciousness.

Now, experience is made up of such intuitions, is their aggregate, and is therefore strictly limited to the phenomena of the present moment, to sensible impressions as they occur, and in the order in which they occur. We know nothing, the empiricists say, of the ground of these phenomena, of their efficient cause, or of any necessary connection existing between them. However frequently one may have been repeated, we have no assurance that it will ever occur again. We know only that they come in succession, that as one departs, another rises. Of the source whence they come, or the cause which produces them, we know nothing, because we have no intuition or experience of such a source or cause. Empiricism, then, it is evident, terminates in utter skepticism.

The aim of Kant, as I have said, is to mediate between these two methods. He does not purpose to examine directly the doctrines which are in dispute between the dogmatists and their opponents, so as to ascertain whether the evidence preponderates in favor of or against them. This was the method of former metaphysicians, and he repudiates it as uncertain and hazardous, — a mere groping in the dark, guided by no principle, and leading to no positive or unquestionable result. He complains that metaphysics, unlike logic and geometry, make no progress, but remain essentially as they were three thousand years ago. The old questions perpetually recur; not one of them has been definitively settled. What one builds up, another pulls down; and this process is continually repeated. Giving up, therefore, at least for the present, any examination of the main points at issue, Kant goes farther back, and proposes to institute a critical examination of Pure Reason itself; — that is, of the mind as it exists *a priori*, as yet uninformed and uninfluenced by any experience whatsoever; — an examination of the cognitive processes, through which we know anything, in order to ascertain whether there be any *a priori* elements in them, — that is, any elements which are not empirical, but transcend all experience; to make a perfect list of these elements, if any such there be, and then to determine their limits, the field within which alone they are applicable, and the grounds on which they must either be accepted as valid and trustworthy, or be banished into the realm of shadows and illusions. Consequently, Kant declares that his work is not properly metaphysical, but

Critical, — a sort of preliminary examination of the ground, in order to determine whether such a science as Metaphysics is possible. Instead of asking how the objects affect our cognitive faculties, he proposed to inquire how our cognitive faculties affect the objects which are presented to them. On account of the change of method thus effected, Kant compares himself to Copernicus, who, finding that he could not explain the motions of the heavenly bodies by supposing the firmament to turn round the spectator, tried the opposite hypothesis, by supposing the spectator to turn, and the stars to be at rest. From the centre of the mind itself, Kant observed the action of our cognitive faculties on surrounding things. He looked upon the outward world, and upon all objects of thought which are foreign to ourselves, as modified by our own mental constitution, — the mind projecting, so to speak, its own modes of being upon the external creation. "It sounds strange at first," he says, "but it is none the less certain, that the mind does not derive its own primitive cognitions from nature, but imposes them upon nature."

Herein, as already remarked, Kant appears as the successor and rival of John Locke. The purpose of both is "to inquire into the origin, certainty, and extent of human knowledge;" and as a means to this end, to make a critical examination of the faculties of the human mind, and a careful analysis of its principal ideas and cognitions, in order to ascertain how far they are trustworthy. This purpose seems a legitimate and reasonable one, though it is open to the sarcastic objection brought against it by Hegel, who remarks, that an attempt to examine our mental faculties, before employing them in the search after truth, is as absurd as the determination of old Scholasticus, never to go into the water till he had learned how to swim. Of course, this preliminary examination must begin by taking for granted the very thing which we wish to prove, namely, that our faculties are trustworthy, — that is, that they are competent to examine themselves. This objection is ingenious, and yet it is in great part sophistical. Through consciousness and memory, the mind somehow has the marvellous power of witnessing its own operations, of seeing itself think, and thereby of judging its own work as if it were the work of another being. All that Hegel fairly proves is, that the judgment so formed, if a favorable one, is not necessarily infallible. Certainly it is not; infallibility is the attribute only of omniscience. But limited and finite though it is, the human mind is abundantly capable of detecting inconsistencies and contradictions in its own work; and as the

presence of these faults affords a presumption, which is well-nigh irresistible, that the work is wrong, so the absence of them furnishes at least *primâ facie* evidence that the work is right. To this extent, at least, the undertaking of Locke and Kant is legitimate. For any greater measure of certitude, we must fall back, as Descartes did, on the veracity of God. When the skeptic endeavors to impugn even this *primâ facie* evidence of the truthfulness of our faculties, which is all that Kant and Locke need to assume in the outset, he is himself guilty of the fallacy which was long ago pointed out by Thomas Aquinas: "*Etiam qui negat veritatem esse, concedit veritatem esse; si enim veritas non est, non verum est non esse veritatem.*" He who denies every assertion thereby denies his own denial, and so contradicts himself. We cannot make a true general remark, that *all* general remarks are *false;* or, what is the same thing, that our faculties must be presumed in the first place, and before examination, to be untruthful.

Against the Empiricists, Kant proves abundantly, that *a priori* elements — Innate Ideas, if you choose to call them so — do enter into all our knowledge, even that of the simplest kind. We cannot *know* any object whatever — not a bit of stone or metal, not the simplest geometrical figure — except by the aid of primitive and necessary ideas and principles, which never could be derived from sense, but which the mind supplies from its own stores. Without these, experience itself would not be possible. To the *receptivity* of the mind, — that is, to its power of receiving impressions and intuitions, in regard to which it is merely *passive*, — there must be added the *spontaneity* of mind, — that is, its power of reacting upon and modifying these impressions, of shaping them, perceiving their relations to each other, and binding them together into that whole which we call an object of experience.

On the other hand, against the Dogmatists, Kant undertakes to demonstrate that these *a priori* elements and principles are applicable only within the field of experience, or if pushed beyond it, lead only to delusion and error. The receptivity of mind, without its spontaneity, is blind and useless, a mere heaping together of crude materials, which no more constitutes *knowledge* than a shapeless pile of bricks does a house. But then, spontaneity without receptivity is empty and void, mere Form without Matter, unimaginable abstractions, from which no cognition can be derived. To adopt the Kantian phraseology, Concepts without Intuitions are empty; Intuitions without Concepts are blind. Only the union of the two makes experience possible. And even this union is merely

subjective, a product of mental action, not corresponding to any reality, or thing in itself, irrespective of our cognition. Kant, it is true, calls this union "objectively valid;" but he means only "valid for all possible experience whatsoever;" — valid not only for the present, but for past and future, experience; valid not only for my experience, but for yours and his, for that of all mankind. It is called "valid," because it is a necessary element of experience, for without it no experience would be possible.

Previous systems differed from each other in the relative importance which they attached to the two cognitive faculties, — that is, to the faculty of Sense, by which we have Intuitions, and to the Understanding or Intellect proper, by which we have Thoughts or Concepts. The Dogmatists say, these two differ only in degree, and that the first, the evidence of Sense, is incomplete, confused, and indistinct; while the second, the Understanding, clears up this confusion, removes this vagueness, and gives us full, clear, and certain knowledge. Thus, Descartes maintains, that the criterion of perfect knowledge or certainty is having clear and distinct ideas; and Leibnitz affirms that an infinite number of confused perceptions of sense exist even in the lowest Monad, and rise successively to distinct and conscious knowledge only in the intellect of the higher orders of creation. Not so, say the Empiricists; it is true that the two differ only in degree, but as all our knowledge is derived from impressions on the Sense, it is most distinct, vivid, and certain when nearest its source. The idea or conception, which remains after the sensuous impression has ceased, is only a faint and diluted copy of that impression. All ideas which cannot be referred back to a sensuous origin are mere chimeras; and the immediate testimony of the senses is the only source of full and perfect conviction. All else is mere opinion or belief. The Skeptic says, neither faculty is trustworthy; both deceive. Our senses often give us false impressions, and the understanding is often mistaken in the inferences which it draws from them.

Among these divergent opinions, the Critical Philosophy takes intermediate ground. Kant says the two faculties differ in kind, each having its peculiar function to perform; and the action of the two must be united before any knowledge can result. This is only saying that the human mind not only passively receives *sensations from* things, but apprehends *relations between* things; that the former are appreciable by the senses and picturable by the imagination; the latter are not. They can only be conceived; they result from comparison. My dog hears the successive and

the simultaneous notes in a complex tune as well as I do, probably much better, since his hearing is more acute. But he certainly has no apprehension either of the harmony or the melody. A medley of inharmonious sounds will make him howl; and he will howl also at a grand orchestral movement by Haydn or Mozart, — probably with just as much appreciation of music in the one case as in the other.

I borrow an eloquent statement of the same doctrine from Dr. J. H. Newman. "One of the first acts of the human mind," he says, "is to take hold of and appropriate what meets the senses; and herein lies a chief distinction between man's and a brute's use of them. Brutes gaze on sights, they are arrested by sounds; but what they see and what they hear are sights and sounds only. The intellect of man, on the contrary, energizes, as well as his eye or ear, and perceives in sights and sounds something beyond them. It seizes and unites what the senses present to it; it grasps and forms what need not be seen or heard except in detail. It discerns in lines and colors, or in tones, what is beautiful, and what is not. It gives them a meaning and invests them with an idea. It gathers up a succession of notes, as it were, into a point of time, and calls it a melody; it has a keen sensibility towards angles and curves, lights and shadows, tints and contours. It distinguishes between rule and exception, between accident and design. It assigns phenomena to a general law, qualities to a subject, acts to a principle, and effects to a cause. In a word, it philosophizes; for I suppose Science and Philosophy, in their elementary idea, are nothing else than this habit of *viewing*, as it may be called, the objects which sense conveys to the mind, of throwing them into system, and uniting and stamping them with one form."

CHAPTER XI.

KANT'S "CRITIQUE OF PURE REASON." TRANSCENDENTAL ÆSTHETIC.

WHAT Kant calls an Analytical Judgment is only a definition, a mere explanation of the meaning of a word, and therefore adds nothing to our knowledge. When I say, "a triangle has three angles," "a quadrilateral has four sides," the proposition is merely verbal and explicative; it tells what I mean by the use of certain words, but it expresses no new fact or truth. But when I say, "Iron is hard," "sugar is soluble," "a stone, if left unsupported, falls to the ground," the proposition teaches a new fact or truth; it increases knowledge, and is therefore called a Synthetical Judgment. It is so called because it *unites* the attribute "hardness" or "solubility," expressed in the predicate, to the "iron" or "sugar" which forms the subject. All knowledge takes the form of a judgment; every fact or truth may be expressed by a proposition in which a predicate is united by the copula with a subject. Hence, all knowledge is a *synthesis*, a union, a putting together of two or more things; and hence the phrase, "synthetical judgment."

All the facts which we learn from experience are properly termed "empirical Synthetical Judgments." But when we assert, as we do with absolute certitude, that every change must have a *cause*, every sensible quality must inhere in a *substance*, Space is *infinite* and *indestructible*, etc., we go entirely beyond experience; we assert what experience is utterly incompetent either to teach or to verify. Such assertions are denominated by Kant "Synthetical Judgments *a priori*." Hume directed his attention almost exclusively to *one* of these cases. He saw clearly enough that the idea of *cause* cannot be furnished by experience, and therefore, naturally enough, asked what is its origin. Whence did we obtain it? This is Hume's problem. Make the question universal, state it in the broadest possible form, and we have the great problem which the Critical Philosophy undertakes to solve: "How are Synthetical Judgments *a priori* possible?" The phraseology is a fair

specimen of that jargon of technicalities in which Kant's soul de lighted; but its meaning here is obvious enough; throwing aside mere Analytical Judgments, which are evidently of no account, how is it that, independently of experience, we are able to know anything with absolute certainty? To the consideration of this question, the "Critique of Pure Reason" is exclusively devoted.

We first seek for a criterion or test by which we may securely distinguish *a priori* knowledge from that which is founded on experience. Kant finds such a test, already pointed out by Leibnitz, in the characteristics of universality and strict necessity, neither of which can be attached to any propositions of empirical origin. Human experience is never complete, never exhausts the possible variety of cases; its judgments, therefore, are never universally true or demonstratively certain; but, founded on an inductive process, they are valid so far as our observation has extended. The contrary is always possible and conceivable. Not so with all the propositions of mathematics, with some axioms in physics, and with many other truths, that are implied in all the forms of speculative knowledge. These carry their own evidence along with them, no case being supposable where absolute and universal certainty would fail to attend them. Therefore, they are not derived from experience, and the question recurs with regard to their origin, Whence does the mind obtain them?

Kant defies the world to give any other answer to this query than his own; that they are *a priori* forms of the mind itself, — the colored medium through which we look out upon the universe of cognizable things. The material world is deaf and dumb to such truths. The mind does not derive them from without, but from its own stores, and, by its own inborn energy, imposes them as necessary and immutable laws upon the outward universe. Our perceptive faculties have a peculiar organization, and therefore we know *a priori*, that the information received through the senses must conform to this organization, receiving certain changes from the passages through which it is transmitted. In what manner things as they really are would appear to beings of a different constitution and nature from ourselves, we cannot even conjecture. But we know how they *must* appear to us, and therefore, prior to experience, we can determine some particulars in relation to them with absolute certainty. To inquire into the actual constitution of things, — their real nature, as distinct from the *appearances* which they assume to us, — is a hopeless endeavor. It is seeking to know, without using the only means of knowledge. But it is a

gross error, though a natural one, to consider our own modes of knowing as modes of being inherent in things as they really are; to give objective validity to subjective laws.

As Kant so frequently speaks of the *synthesis*, which is necessary in order to constitute knowledge, let me illustrate the necessity of it a little farther.

An Intuition is a perception of some one impression now made upon the mind, which, as referred to its origin in the faculty of sense, is either an external impression of some quality in an outward object, as a blue color or a circular figure, or an internal impression of some affection of mind, as fear or aversion. An object is a bundle or *fasciculus* of these qualities or attributes; Mr. Mill calls it "a group of sensations;" Kant calls it a "synthesis of intuitions." Thus, a rosy color, a nearly spherical shape, a subacid taste, moderate hardness to the touch, etc., make up the object which we call an apple. Still farther: an object is an aggregate not only of qualities or attributes, but also of parts. The Intuitive faculty apprehends by units, only one at a time; and therefore takes in successively the smallest parts, the *minima visibilia*, of the outline, and the extent or magnitude, of every object; because every intuitive perception, says Kant, being contained absolutely in one moment, can be only of an absolute unit of extension and an absolute unit of time. Every object existing in space contains an indefinite number of such units of extension; every event taking place in time, be it of longer or shorter duration, contains a multiplicity of such units of time. Thus, every object and every event is, *to our apprehension*, though not necessarily in itself, a manifold, a complex of many parts; and can be apprehended as a whole, or as one thing, only by a synthesis of these parts. The function of Sense, of the Intuitive faculty, is to perceive or take in these units singly, and thus furnish us the Matter of knowledge; the function of the Understanding, or thinking faculty, is to perform the synthesis of these parts, through thinking them in their proper relations to each other, thus enabling us to apprehend the object as one whole.

We can now understand Kant's oft repeated phrase, "grasping together the manifold of intuition in the unity of apprehension." We also see how little single intuitions, mere perceptions of sense, can really teach us. True, they are the constituent elements, the Matter, of our knowledge; but without the coöperation of the Understanding to put them together into wholes, through discerning their relations to each other, they no more constitute that

knowledge than a pile of bricks constitutes a house. Relations, as I have already abundantly proved, cannot be discerned by sense, nor represented by the imagination. Thus, an angle is a relation; the direction of a line or a surface is a relation. I can *see* only the two lines and their point of junction; but I can only *think* their angular divergence; for this is a general abstract idea, a Concept, not merely similar to, but precisely the same as, the same amount of angular divergence of any other two lines or surfaces. Sense perceives only the singular, the individual units, and cannot unite them; the Understanding thinks the general, the universal, and makes a synthesis of the units.

Observe now the mental process by which, according to Kant, we form that object of thought which we believe to represent an external object, — say, a book. We will suppose the unit of extension for the intuitive faculty to be an inch. In reality, it is much smaller; for a pin's head is a manifold of intuition, just as much as a mountain; since we readily apprehend many differences in shape and other attributes between a pin's head and a hemp-seed of about the same size. But an inch will do for an example. We perceive or intuit successively the six or eight inches that make up the length of the book; and we apprehend also the relation of these successive inches to each other; namely, that they are continuous, and all lie in the same direction, so as to form a straight line, being very different from a broken line or a curve. On coming to one of the corners, we notice that the two successive units, instead of being in the same direction, are at right angles with each other. Continuing this process, we put together the outline of the book; and by the same joint action of the Intuitive faculty and the Understanding, we cognize successively the thickness, the weight, the color, the texture, and other attributes, and thus fashion a manifold into the one object of knowledge, the whole which we call a book. Though these steps are really taken successively, each in its own moment of time, the whole is so quickly executed, that it appears to be done instantaneously; for as Hobbes remarks, "thought is quick." But that time really elapses in the gradual comprehension of the object is proved when we try the process with some novel and interesting object, of irregular shape and remarkable attributes, such as a newly discovered flower, or mineral; for then a perceptible length of time and effort of attention are necessary in order to take it in and understand it. Compare also the faint and indistinct notion which we gain of a landscape that is new to us by a mere momentary glimpse of it

through a window, with the full and correct knowledge which an artist has formed of it, when he has studied it long enough to reproduce it from memory on canvas. Motion, also, can be apprehended only by a synthesis in time of the units of intuition. Any definite and limited space or time, though not filled up with sensations, as a triangle, or an hour, considered abstractly, is a manifold so grasped together. Remember, also, that most of the qualities or attributes of the things around us, which we loosely speak of as perceived all at once by our senses, are in truth not perceived by sense at all, but only imagined or mentally reproduced from the recollection of former intuitions suggested by the few qualities that we really do have an intuition of at the moment. Thus I may have an intuitive perception only of the shape and color of the apple, and imagine, without actually perceiving, its weight, taste, smell, etc.

It is not denied that there may be several simultaneous impressions on my different senses, or a very complex impression on any one of them. Thus, an intricate geometrical figure may be impressed all at once on the retina of the eye; and the palate, nostrils, hand, and eye may all be affected at the same moment by one external object. But the essence of the doctrine here maintained is, that these mere sensations, in themselves considered, without attendant and coördinate action of the understanding upon them, whether they come simultaneously or successively, convey no knowledge whatsoever. They are as if made upon the senses of a brute animal, or upon our own senses when we are in a reverie or in deep thought, and so do not heed them, and are not even conscious of their occurrence. Attention is indivisible, and must be added to mere Sensation (*Empfindung*), before we can have Intuition, or a *Vorstellung*, which is a *clear* Presentation to consciousness. Consciousness, argues Kant, is the indispensable prerequisite for all cognition. "If I am conscious of the Presentation, then it is *clear;*" that is, I can then distinguish it, through comparison, from some other Presentation; "if I am not conscious of it, it is *obscure;*" that is, it is mere Sensation. Hence, every mental "object," which is perceived and clearly thought as one whole, is really a manifold of intuitions and relations, requiring time and effort for their cognition, and grasped together by an act of the understanding into a single concept. The minimum of intuition is actually an indivisible unit, the vanishing point alike of perception and thought.

It is curious that Dugald Stewart, who argued stoutly against Kant's philosophy, himself teaches, and illustrates with profusion

and elegance, this very doctrine of the indivisibility of attention, and of the time and successive efforts which are required to cognize any object that is larger than the minimum perceptible by sense. He thus taught genuine Kantianism without knowing it. "If the perception of visible figure," he argues, "were an immediate consequence of the picture on the retina, we should have, at the first glance, as distinct an idea of a figure of a thousand sides, as of a triangle or a square. The truth is, when the figure is very simple, the process of mind is so rapid, that the perception seems to be instantaneous; but when the sides are multiplied beyond a certain number, the interval of time necessary for these different acts of attention becomes perceptible." Remember also what I have already stated, that not only every sensible object, but every judgment and proposition, because it expresses a union, through the copula, of a subject with a predicate, made in consequence of a comparison by which we discern the relations between the two, is a synthesis, and every synthesis is a work of the understanding.

I have dwelt thus long and minutely upon this portion of the doctrine of Kant, because it supplies a key to his whole system. The separate and peculiar functions of the Intuitive Faculty and the Understanding, and their necessary conjoint action, each under its own laws, in forming any cognition whatsoever, will be found to throw much light on the whole question respecting the origin, nature, and certainty of human knowledge. The Critical Philosophy uproots from the foundation the doctrine of the Sensualists, that all our ideas are derived from impressions on the Sense, and that the senses furnish the only criterion by which we can distinguish the true from the false, the real from the imaginary. The mere receptivity of mind may depend on the proper physical action of nerve and brain; but what is thus received no more constitutes knowledge than a heap of letters of the alphabet, of printer's types, taken at random, would spell out an algebraic treatise or an epic poem. The spontaneity of Thought, the coördinating power of the Understanding, must come in to arrange and unite these scattered elements of cognition, binding them into an orderly whole, before they can express even the simplest object of conscious perception. Matter without Form is unmeaning and chaotic; it is the dream-like mental state of a dog or cat.

The doctrine that all our knowledge is not derived from sensation will become still more firmly established, if we shall find that, among the elements or units which make up "the manifold of intuition," and thereby constitute the objects of knowledge, there are

some, which, since they are universal and necessary, cannot be derived from our limited experience; since this extends only to a few cases, and therefore cannot tell us what must be in all cases. These must have their origin in the mind itself, antecedently to all experience, though first developed on occasion of such experience. Such elements there are; and far from being meagre in their nature or restricted in their application, whole sciences, of large import and priceless utility, are entirely founded upon them. To prove their existence, Kant first analyzes the intuitions of sense, in that portion of his "Critique" which he calls "Transcendental Æsthetic;" that is, the determination of the necessary *a priori* elements of mere perception.

The intuition of Space is not derived *from* objects through experience, but must preëxist in the mind *before* we could have any experience of an object. Thus, I do not first perceive a book, and then derive from it an idea of the space which it occupies; for the book would not be a book, if it were not extended in length, breadth, and thickness; that is, if it did not occupy space. It is true, that I must perceive some external object before the idea of Space can be, so to speak, *brought out* in the mind, or developed into distinct consciousness. Just so, I must see something, before I can know what the power of vision is; but then it is certain that the power of vision must previously have existed, or I could not have seen anything. Objects could not have been perceived by me as external,—I could not have known what externality or *outness* was, if the idea of Space had not already been in my mind.

Again: Space is necessary for the existence of objects; but objects are not necessary for the existence of Space. I can *think away* all objects, imagining them all to have been annihilated; but the space which they now occupy cannot be thought away; it will not be annihilated, even in imagination. Then it is a necessity of thought, and not a product of experience. I am not in it, but it is in me.

Thirdly, all objects are finite or limited; I cannot even conceive of them except as having limits and bounds. But Space is necessarily conceived by me as unlimited or infinite; I cannot imagine that there are bounds beyond which Space is not. Therefore, to derive Space from Body would be to suppose that the Finite includes the Infinite, or that the part is greater than the whole.

Moreover, Space is one, a single object, and all particular definite spaces are arbitrary and imaginary limitations of it, being carved out of it by our finite thought. Hence it is a Percept, and not a

Concept; it is an individual presentation to consciousness, and not a generalization from experience. To adopt Kant's language, Space is the form of the faculty of sense, or the subjective condition under which alone external perception is possible.

The reasoning is very similar in the case of Time. The common explanation of the origin of our idea of Time is, that we obtain it by abstraction and generalization, from observing the duration, simultaneity, and succession of events. But Kant says the reverse is true; if we did not first have the idea of Time, we could not know what duration, simultaneity, and succession are; since these are only modes, or modifications, of Time. Duration is the continuity, a *quantum*, more or less, of Time. Simultaneity is coexistence at the same Time. Succession is one event coming after another in Time. Evidently, then, if I had not *already* known what Time is, I could not have known what a quantum or measure of Time is, nor what coexistence or succession is. That is no definition which depends on the presence of the very word which ought to be defined. Time is the *prius;* duration, simultaneity, or succession, is the *posterius;* it cannot be derived from them, but they must be derived from it.

Neither can Time in general, or in the abstract, be derived from our cognition of particular limited Times. Days, hours, and minutes would have no significance to me, if I had not already a conception of Time, of which these are arbitrary divisions or measures. So the clock, or the place of the sun in the heavens, would not tell me what time of day it is, if my previously instructed mind did not give them an artificial significance, a meaning which is not their own; for to my senses, directly, they show nothing but position and motion, or change. Again, Time in general is *one* infinite and undivided whole, a continuity without break, a seamless garment extending to eternity both before and after. Our division of it, our portioning it out into definite limited times, is an arbitrary and imaginary process. The slightest real division of it, the slightest separation of one part of it from its nearest part, is utterly inconceivable. Equally inconceivable is any limit or termination of Time. I can easily imagine the Mississippi dried up, Niagara frozen into silence, or the earth no longer turning on its axis; but the river of Time flows on forever; not even in thought can I put a limit to its perpetual, its uniform, lapse.

"Labitur et labetur in omne volubilis ævum."

Surely, experience could not teach me these absolute and necessary truths; they are necessities of thought, not necessities of real ob-

jective existence. If they were the latter, the mind could never have obtained that firm grasp of them which it now possesses. Time, then, Kant concludes, is *a priori* in the mind; it is subjective; it is a form of the faculty of sense, of the *internal* sense; it is the colored glass through which we behold all events, these being manifested to us only as changes, as successive states, of our own minds.

Now this doctrine, that Space and Time are *only* forms of human perception, not modes of real existence, is the most comprehensive and thorough-going system of skepticism that the wit of man has ever devised. The very constitution of our nature, a fundamental law of human belief, which compels us to assert their objective reality, their necessary existence independent of our thoughts, is held to be a proof that they do not exist except as necessary illusions of our minds. Then no other law of thought, not even that which unites the conclusion of a syllogism with its premises, is valid. The reasoning which impeaches one of the fundamental laws of belief, one of the necessary principles on which all reasoning is based, thereby vitiates and destroys all those laws and principles, and, in so doing, stultifies itself. In fact, the obvious result of the system is not so much Skepticism, as Nihilism; it does not doubt, it dogmatically denies; and by affirming such denial, it contradicts itself. It does not merely say, that the objective reality of Space and Time *cannot be proved;* every one admits that. But it affirms that such reality is impossible. This is not saying that existence as it appears to us is unreal, but that existence itself, under any form whatsoever, is inconceivable. For existence is continuity of being, or being related to some other being either in Space or Time; and if these are unreal, no continuity, and no such relation, is possible. Without Space, there is no coexistence, but the universe is contracted to a mathematical point, which is nowhere, and therefore has no relation to anything beyond itself; without Time, there is no successive existence, but the past and the future shrink into the indivisible moment which alone is present; and even this disappears as soon as it begins to be.

And yet Kant maintains the existence in some inconceivable manner of some inconceivable things, which he calls *noumena*, or things as they really are in themselves. There must be, he maintains, a ground or reason for the phenomenal world, for the things which appear; something which determines phenomena to appear in their present forms, rather than in some other modes of apparent being. *Why* there must be such a ground or reason, or how the

affirmation of it is justified by any higher or stronger law of belief than that which guaranties the existence of Space and Time, he does not inform us. He takes for granted the celebrated principle of Leibnitz, that nothing exists, either in appearance or in reality, without a Sufficient Reason for its existence. I admit the validity of this Leibnitzian axiom; but on this ground only, that the very constitution of my nature compels me to admit it. And I argue that an imperative necessity of precisely the same character compels me to admit also the objective reality of Space and Time. If we deny one fundamental law of belief, we are bound in consistency to deny all such laws. One such principle cannot be saved from the wreck, in order to serve the purposes of a theorist. They must stand or fall together; for they all rest on essentially the same basis, a necessity of thought, and the suicidal consequences of rejecting them.

We can admit the *positive* portion of Kant's theory, then, namely, the *a priori* cognition or intuition of Space and Time, without accepting the skeptical doctrine which he has needlessly and unreasonably appended to it, — the doctrine, that is, that Space and Time in themselves are unreal and illusive. The *a priori* character of our knowledge of them is strikingly illustrated by the number of distinct original principles into which the idea of each of them may be explicated, — principles which are equally *a priori* and necessary with the primitive cognition in which they are all summed up, since it is impossible to doubt any one of them, or to derive it from mere experience. Schopenhauer has made out in tabular form a full list of these primitive axioms, which I here translate, as they show the curious parallelism and symmetry which exist between our notions of Space and Time.

Time.	Space.
1. There is but one Time, and all different times are parts of this one.	1. The same.
2. Different times are not coexistent or simultaneous, but successive.	2. Different spaces are not successive, but are coexistent or simultaneous.
3. Time cannot be thought away, but every thing in Time can be thought away, or imagined as non-existent.	3. The same.
4. Time has three divisions, Past, Present, and Future; and these three form *two* directions (before and after), with one point of indifference, one invisible *Now*, at their junction. In this respect, Time may be compared to a magnet, with its north and south poles, and point of indifference half way between them.	4. Space has three dimensions, length, breadth, and thickness.

5. Time is infinitely divisible.

6. Time is homogeneous and continuous; that is, no part of it can be separated from another part by anything which is not Time.

7. Time has no beginning or end; but every beginning and end are *in* Time.

8. By means of Time, we count.

9. Rhythm (or proportion) is only in Time.

10. We know the laws of Time *a priori*.

11. Time can be intuited or perceived *a priori*, but only under the image of a straight line produced to infinity.

12. Time has no persistence, but no sooner exists than it vanishes.

13. Time has no rest.

14. Every thing *in* Time has duration.

15. Time itself has no duration, but all duration is *in* it, and is the persistence of that which abides or continues, in contrast with Time's own restless lapse.

16. Movement is possible only in Time.

17. In equal spaces, swiftness is in inverse proportion to the Time.

18. Time is not directly measurable, but only indirectly, through motion; so we measure Time by the movement of the hands of the clock, or by the movement of the sun.

19. Time is everywhere present. Every part of Time is everywhere, — *i. e.*, is simultaneously in every part of Space.

20. In *pure* Time (*i. e.*, in Time without Space), every thing would be successive. Therefore Thought, which belongs to Time, but not to Space, must always be successive; that is, one Thought must come before or after another Thought.

21. (Hence) Time makes the change of attributes possible; from being black and hard, for instance, a body can, *in Time*, become white and soft.

22. Every part of Time contains all parts of Matter.

23. Time is a *principium individuationis; i. e.*, two *events*, perfectly alike in every other respect, are still perfectly distinguishable from each other, because one takes place at one time, and the other at another time.

24. Now, the present moment, is without duration.

5. The same.

6. The same.

7. Space has no limits or boundaries; but all limits are *in* Space.

8. By means of Space, we measure.

9. Symmetry (or correspondence in contrast, like the right and left hand) is only in Space.

10. The same.

11. Space can be immediately intuited *a priori*.

12. Space can never pass away, but persists forever.

13. Space has no motion.

14. Every thing *in* Space has position.

15. Space has no movement, but all movement is *in* it, and is the movable's change of place, in contrast with the absolute immobility of Space.

16. The same.

17. In equal times, swiftness is in direct proportion to the Space.

18. Space is directly measurable in itself, and only indirectly measurable through motion. Thus, we speak of a given amount of space as a day's journey, or an hour's walk.

19. Space is eternal; every part of it exists through all Time.

20. In *pure* Space, every thing would be simultaneous; for there would be no Time, in which anything could begin to be, or cease to be.

21. Space makes the persistence or unchangeableness *of substance* possible. Thus, it is only as occupying Space, that we can conceive the substance of iron to remain unchanged, that from a solid it should become fluid, *i. e.*, should be melted.

22. No part of Space contains the same Matter with any other part of Space.

23. Space is a *principium individuationis; i. e.*, two *things*, perfectly alike in every other respect, are still perfectly distinguishable from each other, because they cannot occupy absolutely the same place at the same time.

24. The mathematical point is without extension.

25. Time in itself is empty or void, being perfectly indeterminate.	25. The same.
26. Every moment of Time is conditioned by the preceding moment, and is, only so far as this predecessor has ceased to be.	26. Every definitely bounded Space is, by means of its Position, strictly determined throughout in reference to every other portion of Space.
27. Time makes Arithmetic possible.	27. Space makes Geometry possible.
28. The indivisible (single) of Arithmetic is the unit.	28. The indivisible (single) of Geometry is the mathematical point.

Now these fifty-six truths relative to Time and Space, twenty-eight to each, are primitive, necessary, universal, and *a priori*. Certainly they are not based upon reasoning; for although they are now first stated as embodied in language, you recognize and admit them without hesitation, as first principles which you have always admitted and acted upon, and which need only to be enunciated in words in order to be brought into distinct consciousness. They are not new to you. Experience did not generate them, and is not necessary in order to prove them; it has only furnished the light which enables you to read them as previously imprinted in ineffaceable characters on the secret tablets of your mind. They are innate ideas, principles constitutive of experience, and without which experience would not be possible.

Time and Space, according to Kant, are "empirically real;" that is, they have "objective validity," or validity in thought for all *phenomena*, for all that appears to us. They are universal and necessary conditions of all experience, not only of all present, but of all past and all future, experience, not only for my experience, but for yours, for everybody's, for the experience of all mankind. They are so, because they are subjective forms of the Intuitive faculty itself, and so are necessary conditions of all experience, since without them, experience would not be possible. Hence, whatever we can affirm of the nature and relations of Space and Time, must hold true, also, of all phenomena; since all phenomena exist only in Space and Time, and appear only through them. Space is the form of the external sense; therefore nothing external can appear to us except as occupying space, or as marking points and limits of space. Time is the form of the internal sense; for whatever is presented in thought or consciousness is presented in its own definite time or moment, either before or after some other event. And because even external bodies and events can be *known to me* only through the mental acts by which I take cognizance of them, Time, which is a form of these mental acts, is a form also of the external phenomena which are known through them; that is, Time is a form of *all* phenomena whatso-

ever, whether external or internal. Every object of sense or consciousness has its own time, at which it exists or is perceived; and it cannot even be imagined out of Time. I cannot imagine events occurring or objects existing *out of Time;* any more than I can imagine bodies existing *out of Space.*

But while Time and Space are thus pure or *a priori* Intuitions, they are blanks, or mere Forms of Intuition. If sensation be not added, to fill up these blank Forms with some Matter, these Forms are mere nonentities, which can neither be perceived nor imagined. I can perceive objects in Space and events in Time; but apart from these objects and events, I can perceive nothing. Sunlight is seen only as reflected from real objects. Pure blank space, which has no limits or shape, because it is infinite and is not made up of parts, because it is one and all-embracing, any division of it being wholly arbitrary, is mere nothingness. I can imagine geometrical figures and material objects *in it,* but I cannot imagine it apart from these figures and objects; for there is nothing in it, so to speak, for the mind to take hold of. *Nonentis nulla sunt predicata;* that which has no distinguishing attributes, except negative ones, is alike imperceptible and inconceivable. In like manner, pure blank Time, in which no event, no change, no mental action, takes place, is mere nothingness. To our apprehension, at least, it ceases to exist, and a thousand years are compressed into a single moment. We have a proof of this in perfect or dreamless sleep, during which we are unconscious of the lapse of time, the moment of falling asleep and that of awaking appearing to be immediately continuous. We are conscious of the succession of thought, but not of the Time in which that succession takes place; yet we necessarily perceive that Time is a condition of the succession, for without it, the very word "succession" is meaningless. But while, in dreamless sleep, we cease to be conscious of the lapse of Time, we have an irresistible conviction that Time continued to elapse during that apparent interval. There cannot be a break or interval in the lapse of moments, but Time flows on in one uniform and unbroken course forever.

But while Time and Space thus necessarily have empirical reality, since without them no experience would be possible, Kant says they are "transcendentally ideal;" that is, they have no reality out of or beyond experience. For the very reason, that they necessarily exist *in* the mind, being part of its texture and framework, they do not exist *out of* the mind. For the very reason that they are forms of intuition, when intuition is not, they are

not. Their very essence consists in enveloping our perceptions: take away the perceptions, and you take away that also in which they are infolded, and which is really a part of them. In short, because they are forms of perception, which is ideal, they are not attributes of things as they are, *dingen an sich*, which are real. They are necessary elements of the world of phenomena, of all that appears; but they do not affect *noumena*, or things which exist independently of our perceptions.

This doctrine of Transcendental Idealism, as it is called, seems to me, as I have already said, the weak point in Kant's metaphysics. He arbitrarily assumes that there is no correspondence between things as they really are, and things as they appear to us; but his premises afford no ground for this assumption. The same incompetency of our faculties, which prevents us from asserting that things really are as they appear to us, equally forbids us to maintain that they are *not* as they appear. As Mr. Mansel remarks, "the utmost that his premises could warrant him in asserting is, that we cannot tell whether they are so or not." Because I cannot search the room, I cannot tell whether the book is there or not. But this is a digression; our present purpose is not to criticise, but to expound and illustrate, the system of Kant.

The subjective character of Space and Time enables us to solve one portion of the fundamental problem of the Kantian philosophy. As a part of the question "How are synthetical judgments *a priori* possible?" we may ask ourselves, "How is the science of Pure Mathematics possible?" that is, how are we able, independently of and before any experience, to establish a vast aggregate of geometrical and arithmetical truths, — synthetic in character, that is, amplifying our real knowledge and not merely explicating it — and absolutely certain and universal; judgments which are necessarily true, not only for you and me, but for all mankind, — true not merely in this or that particular case, in which we have tested them by direct observation and experiment, but true for all possible and imaginable instances? Kant's answer is, because Mathematics is the science of pure Space and Time, and, as such, of the *a priori* Forms of the Intuitive faculty itself, through which all the perceptions of experience must pass before they can enter our minds, so that all experience must necessarily conform to them. All material objects must conform to the laws of Space, all numerable and mensurable objects, whether material or mental, must conform to the laws of Time; since Space and Time are innate and original forms of the very faculty through which alone we take

cognizance of these objects; they are the mental atmosphere through which every possible Intuition must come to us, and therefore the Intuition must be subject to the conditions of that atmosphere through which it is transmitted. *A priori*, or before experience, we are just as sure that every material object must occupy Space, that is, must have extension, as we are that every opaque object, if placed in the sun, must cast a shadow. If it did not, it would not be opaque. This, indeed, is a mere analytical judgment, since the word *opaque* means "intercepting the light," that is, casting a shadow. But its certainty is no greater than that of the judgments, unquestionably synthetical, and on which nearly all geometry is based, that two straight lines cannot inclose a space, but that three straight lines can.

In order to establish this Kantian doctrine, two points must be proved: 1. That Space and Time are pure intuitions, or forms of the perceptive faculty, instead of being abstract conceptions or forms of thought; in other words, they form the atmosphere which modifies all the presentations of Sense, and are not general or abstract ideas, formed merely by disregarding other attributes of things, and generalizing one attribute as found in many things. Each is an *individual* intuition, — *one*, and not many. This has been already proved. We may speak, indeed, of particular spaces or particular times; but these are only parts, or arbitrary limitations for convenience, of the one Infinite Space and the one Infinite Time, in neither of which is there any actual break or interval. These parts are not separable, but are *contained in* the one whole; whereas particular men — John, Thomas, and William, for instance — are separable from each other, and are not *contained in*, but are *comprised under*, the abstract conception "man" in general. Besides, as Kant remarks, "different times cannot be coexistent," but must be successive, every one necessarily coming after, or preceding, another; hence, Time can be represented only as a mathematical line, having but one dimension: whereas different men, different horses, different trees, may be coexistent, so that we can have a general idea, formed by abstraction, of each class. It is certain, therefore, that Space and Time are *a priori* Intuitions, and not Concepts, or abstract general ideas.

To make what follows more intelligible, I must here explain one point in the Kantian phraseology. To *construct* a Concept or abstract general idea is to individualize it, by bringing before our mind an example of the objects denoted by that Concept. We thus, so to speak, make the Concept sensuous, by bringing an in-

dividual case of it, through the imagination, before the senses. Thus the Concept, hexagon or parabola, is *constructed*, when I imagine how a particular hexagon or parabola would look if it were placed before my eyes. I construct *aversion*, when I imagine what my feeling would be if a hateful object were suddenly presented.

Secondly, if mathematical judgments are universally and necessarily true, only because they relate exclusively to Space and Time, and because Space and Time are *a priori* intuitions or forms of the perceptive faculty, not of the understanding, then mathematics must be an intuitive science; that is, it must be based on individual perceptions, though cognized as universal, and known immediately and intuitively, that is, without any reasoning or argument, to be absolutely true and valid. As this statement conflicts with the ordinary theory respecting the nature of mathematical conclusions, it must be confirmed and illustrated at some length. Take the proposition on which all geometry rests, that a straight line is the shortest distance between two points; or, what is about the same thing, that one side of a triangle must be less than the sum of the other two. This is usually stated as an axiom, since it is found to be incapable of proof by reasoning, that is, by deduction from the very idea or definition of straightness, or from any previously established truth. Certainly it cannot be deduced from the definition of "straight," since this designates a *quality* of the line, while "shortest distance" is a term of magnitude, indicating only the *quantity* in question. Analyze the quality straightness as best you may; you can never deduce from it any determination of the quantity involved. But we immediately and intuitively perceive the proposition to be true, when we *construct* it; that is, in Kant's phraseology, when, on paper or in imagination, we take two points, and draw two lines connecting them, the one straight, and the other broken or curved, we directly *see* that the former is the shorter, and in fact, is the shortest possible. And the truth thus intuitively known as such, though only in the particular instance of this one straight line, is immediately recognized as a universal truth, applicable to all straight lines; because the figure thus constructed is a determination of pure Space, no other element entering into it; and since Space is a form of our intuitive faculty itself, all other similar intuitions must conform to it, or be subject to the same law. The truth thus intuitively discerned is a truth not of this one figure alone, but of Space itself; that is, it is a perfect type of all similar constructions in Space. It is universally and necessarily true.

In like manner we proceed, according to Kant, in all geometrical reasoning. We construct the required figure in imagination or on paper, and what is intuitively perceived to hold true of the relations of its parts in this one case, is thereby recognized as a universal truth, owing to the uniform and catholic character of the one all-pervading space, a mental form, in which it is perceived.

That the truths of Arithmetic are obtained in the same manner will be readily admitted as soon as it is established that Arithmetic is the science of Time, just as Geometry is that of Space. Primarily, of course, Arithmetic is the science of number; but number itself is obtained only by the repeated addition of one unit to another. Time is needed for the successive apprehension, that is, for the counting, of distinct uniform impressions upon the mind, no matter of what nature these similar impressions are, or from what cause they proceed; because we can attend to only one impression at one time, or in one indivisible instant. The number *five* means to us the time required for the successive apprehension of five pulsations at the wrist, five beats of the pendulum, five dots on paper, five anything, no matter what the unit may be; because one unit or instant of time is perfectly like every other. This dependence of Number upon Time is indicated in most languages by multiplication being expressed as taking the multiplicand so many "times;" thus, *sechsmal, six fois*, six *times*, one is six. Even when the numbers indicate ratios between spaces, we still speak of the numbers in terms of time; as when we say that the sun is so *many times* farther off than the moon,—not that it is so *many spaces* farther off. To perform arithmetical operations, we must, in Kantian phrase, *construct* the numbers employed; that is, represent them in some manner to sense or to the imagination, as by so many dots on the blackboard, so many fingers of the hand, so many marbles; and then we directly or intuitively perceive — in common phrase, we *see* — the answer to the question. The problem is thus solved by intuition, not by abstract reasoning, or by concepts. Thus, if we are asked why $5 + 7 = 12$, we can give no reason for it,—no reason, I mean, dependent on any analysis of the two ideas, five and seven, since their sum, twelve, is not contained in either of them. But if we first *construct* the two numbers separately, but side by side, as by dots on the blackboard, and then count, or apprehend them successively, not as two groups, but as a single one, we intuitively perceive, or *see*, without reasoning, that they constitute twelve. And in like manner with subtraction. As all arithmetical operations are resolvable into repeated additions or subtrac-

tions; as the artifice of the decimal notation relieves us from the necessity of constructing more than ten units in any one group, all the rest being performed by successive groupings or constructions; and as Algebra is only a combination of arithmetic and geometry, its operations, again, being performed by visible symbols and signs, which are a kind of short-hand, it is obvious that pure mathematics is exclusively an intuitive science. The whole difficulty in mastering it proceeds from the immense extent to which it may be pushed, the infinite range of its applications, and the difficulty of keeping steadily in view, or in memory, all the intuitions on which any one result depends. Each geometrical or arithmetical intuition, though it is apparently only of one instance or example, is in fact generalized, or made universal, by the universality of the Forms of space and time, through which all intuitions must come. What is called "the process of Mathematical proof" is, in truth, only remembering and applying the results of previous intuitions.

In further proof of the intuitive character of geometry, I borrow an illustration from Schopenhauer. Why is an equilateral right-angled triangle impossible? There is no incompatibility of either of these predicates separately with the subject, since a triangle may be equilateral, or it may be right angled; but not both together. So also the two predicates are not incompatible with each other, as they are united in the case of a square. The understanding, by the aid of mere analysis and thought, can supply no reason why they should not be united in the case of a triangle. But as soon as we apply the test of *construction*, that is, attempt actually to form such a figure in imagination or on paper, we see that it is impossible. Assume that the person making the experiment has, as yet, only an imperfect idea of what a triangle is; still, he can, without the aid of experience, by merely constructing a triangle in his fancy, perfect his idea of it, and convince himself of the impossibility to all eternity of uniting the three ideas in one object. This is a synthetical judgment *a priori*, through which, previous to all experience, and yet regulating all past and all future experience, the mind establishes its own laws as objectively valid, — valid, that is, for everybody and for all time.

What thing, asks Kant, more perfectly resembles another thing, than a right-hand glove does the left-hand glove of the same person, or than the reflection of an object in a mirror does that object? But if held before a mirror, the right hand reflected becomes the left hand. Intuitive perception shows that one is the counterpart, that is, the reverse, of the other, a difference between them which

the mere Sense is incompetent to point out, as the same definition will apply to both. The *parts*, taken separately, of the two gloves are, when compared one with the other, precisely alike; but as these parts are put together in a different manner, their *relations* to each other are not the same; hence, as relations are cognized only by the understanding, the difference between right and left can be thought, but cannot be perceived by Sense, nor imagined.

Empirical intuitions are strictly personal; they are incapable of definition, and so cannot be communicated to another. No one can impart to me his intuitions; no one can enable me to look out of his eyes. He can only hold up before me the same object which gives him certain intuitions, and trust, or take for granted, that I shall have the same intuitions from it that he has. I can teach a person what the odor of a rose is, only by applying a rose to his nostrils; what the color blue is, only by pointing him to the sky or some other blue object. But in the case of the geometrical relations of space, and the arithmetical relations of time, equally perceived by intuition, we know that they are absolute and universal, — the same to all minds, the same to all time. What stronger proof could be found that these are inborn in our very nature, a portion of the framework of our mental being?

In like manner, it cannot be made known from mere concepts or definitions, but only from immediate or intuitive perception, what the relations of space are which we designate as Above and Below, Right and Left, Behind and Before, Inside and Outside. When we seek to determine the relations of these relations to each other, we find they constitute an intuitive, not a demonstrable, science; that is, they are immediately apprehended by the faculty of sense, but cannot be made out by deductions of the understanding. Thus, the Bottom of a thing cannot be interchanged with its Top, without *thereby* interchanging *either* its Behind and Before, *or* its Right and Left. Again, Inside cannot become Outside, except what was Above becomes Below, or what was Right becomes Left. If we introduce the relations of the object to the position of the beholder, other interrelations become manifest. Thus, if I face the object from the north side of it, instead of the south, Right becomes Left, and Behind becomes Before; but Up does not become Down, nor Inside become Outside.

Now these theorems are so far from being such *general truths* as have been formed by previous observation, abstraction, and generalization, that probably up to the moment of hearing them enunciated, no one ever expressed them even to himself in general

terms. Yet you have acted upon them all your lives. And you have now admitted them as universal and necessary truths, not because I have reasoned them out, or offered any argument in their support, for I have not done so; but because I have invited you to construct them in an actual example, — say, by this book; and at once you intuitively perceive, that what was thus stated is not merely a particular truth, — true in the one instance of this book, but a universal truth, true of all objects and for all time; that it is an intuition, not like that of the color blue, which may be one thing to you and a very different thing to me, since I am color-blind, but an intuition which must be the same for you and me, for all human minds.

It is the very nature of Time and Space, then, (Kant would say, *of our apprehension of Time and Space,*) that all their parts stand in relations to each other which are absolutely determined and conditioned by some other of these parts. In Space, these relations are called Position and Magnitude; in Time, they are Succession and Number. These relations are peculiar, wholly different from the relations of all our other representations and ideas; since the latter, as I have abundantly proved, cannot be perceived by Sense, but are discerned by the Understanding or thinking faculty; whereas those of Space and Time are not thought out, but are immediately perceived by the intuitive faculty. In the *coexistence* of the parts of Space, and in the *successive existence* of the parts of Time, every part is precisely determined to be what it is through some other part. All Number, and therefore all Arithmetic, depends upon the *nexus* of the parts of Time; all Geometry, on the *nexus* of the parts of Space.

I have but one remark to make on the theory here set forth, which is certainly the most characteristic one, and the most fruitful in important conclusions, of all that are propounded in the "Critique of Pure Reason." Kant's doctrine of Transcendental Idealism, — that we know only the world of phenomena, or what appears, that of *noumenal* existence, or things as they are in themselves, apart from their appearance, being unimaginable and inconceivable, — is an evident corollary from his doctrine of the subjective character, or unreality, of Space and Time. Certainly, if things as they actually are cannot exist except *out of* Space and Time, the attempt to cognize them must be at once abandoned as hopeless. But I am now only concerned to remark, that the sole proof of the reality of Space and Time, apart from the mere representation of them in our minds, is the trustworthiness of memory. He who

affects to distrust the evidence of this faculty must at once become not only an Idealist, but an Egoist, who exists only for the present moment; that is, he must give up the existence both of matter and mind, and admit the reality only of the momentary thought now present to consciousness. Without memory, there is to us neither past nor future, since the latter is but a shadowy adumbration and repetition of the past, projected before us through a reliance on the permanency of the laws of nature. Without memory, there is only the present moment, and existence for a thousand years is concentrated into the focus of the indivisible instant now present to consciousness. Fichte's argument on this point is irrefutable. "There is for us no past, except so far as it is thought in the present. Whatsoever was yesterday is not to-day, for by calling it 'the past,' we deny its present existence; and even *it was*, only so far as I *now* think *that it was*. If you ask, 'Has not a time really passed away'? by that very question you assume the existence of a past; otherwise the question would have no meaning. If you do not assume a past, you will not ask the question, and then time has no past for you." In like manner, on Kant's principles, Space is only a synthesis of innumerable parts; and as but one of these parts is cognized as *now* present to consciousness, the synthesis of all the parts is possible only through memory. Hence, if we cannot trust memory, Kant's doctrine is true; Space and Time are only subjective intuitions, airy nothings, imaginary backgrounds, on which are painted an unreal and fantastic world.

> "Nothing is there to come, and nothing past,
> But an eternal Now doth ever last."
> Our time's a moment, and our space a dot;
> An instant's reach of thought is all our lot.

Life, to adopt a scholastic phrase, is but a *nunc stans*, a mathematical point, an instant that is forever repeated.

But the Positivist doctrine, that nothing exists to us but the present state of consciousness, what we *now* feel or think, all else being a baseless inference, annihilates memory, and thereby annihilates Space and Time. The brute lives only in the present; and man, according to this doctrine, is a brute. Birth is a fable, and death has no meaning; or rather, at every instant, our existence both begins and ends.

Indeed, Kant's skepticism, which pervades his whole work, is very brief and summary. He says, all our knowledge is either empirical or *a priori*. Is it the former? Then it is neither universal nor necessary; it is merely an impression on an individual

mind, without any guaranty. Away with it! Is it the latter? Then, for the very reason that it is universal and necessary, it is only a phase of mind, a form of thought. Reject it! Then the conclusion of the whole matter is, that we have no knowledge at all deserving the name. Kant's theory preserves, and even, I may say, demonstrates, the existence of innate truths, — of primitive and irresistible cognitions *a priori*. But by limiting the application of them exclusively to the field of experience, by asserting their subjective character, and thereby denying that they give us any knowledge of things as they really are, he preserves them only in the interests of skepticism, and makes them the foundation, in fact, of a system which resolves all our beliefs into mere illusions and dreams. This disheartening result is aptly described by Madame de Staël, when she says that he caused Philosophy, like an enraged magician, to set fire to the edifice on which she had lavished all the prodigies of her skill.

CHAPTER XII.

KANT'S "CRITIQUE" *continued.* TRANSCENDENTAL LOGIC.

WE come now to Transcendental Logic, or the analysis of the thinking faculty of the Understanding, our object being to ascertain if this also contains *a priori* elements, or Forms of cognition; and if so, to define their number and character, and prescribe the territory within which they can be legitimately used. The science of sensuous objects *constructed a priori*, that is, in the *a priori* intuitions of Space and Time, is pure Mathematics; and we have shown the nature, and proved the validity, of the conclusions of this science. But there is also a science of ordinary sensuous objects, which is Physics, and of super-sensuous objects, which is Metaphysics, or Ontology. Are there any *a priori* elements in the faculty of the Understanding, which will perform the same service for these two sciences as those of the faculty of Sense did for Mathematics? In order to answer this question, we must analyze minutely and carefully the mental process whereby we apprehend in thought any complex object of sense, such as a tree or flower, and thus, in vulgar phrase, *take it in*, and understand it as one whole.

The function of the Understanding, as I have said, is to compare, to apprehend relations, and through these to perform a synthesis, that is, to unite parts into a whole, and predicates to subjects, by means of judgments. There cannot be any knowledge without an *object* of knowledge, and any such object must be a whole, formed by that synthesis of the parts which follows from an apprehension of such relations between these parts as will permit their union with each other. The faculty of Sense, as we have seen, offers us only a manifold of intuition, a succession of units separately perceived, only one of them being present to the mind at one time. "Every intuition," says Kant, "contains in itself a Manifold, or plurality of constituent parts, though it would not be presented to the mind as such, if we did not distinguish the

lapse of time while the impressions were succeeding each other; for *as contained in a single moment*, no Presentation can ever be anything else than an absolute unit." Even the *a priori* forms of Space and Time, because they are mere Forms without Matter, can give us only blank figures constructed in empty space, and aggregates of units considered merely numerically, without any qualities to distinguish one unit from another; that is, they can give us only a *synopsis* of empty parts, but not a *synthesis* of sensible qualities, such as is necessary to constitute an object of actual knowledge. Such attributes as a definite weight, hardness, shape, taste, and smell must be put together in order to construct a cognizable object of experience. But these attributes, or rather the sensations which are so called, are successively apprehended as distinct states of consciousness, but one being before the mind at one time; and this one necessarily disappearing before the next can follow. How can we put together a cognizable whole, how build a house, out of these minute disjointed fragments, no two of which can be taken up, or can even exist, together? We must call in the aid of another faculty, the Imagination or picture-forming power of the mind, and of another principle, which Kant denominates, in his usual uncouth phraseology, "the synthetical unity of apperception."

Imagination can do what the intuitive faculty cannot: namely, it can take up *together* the parts of the manifold, and even hold them together, or all at once, as one picture, before the mental apprehension. Thus I can have what may be called a synoptical view — a *coup d'œil* — of the cognizable object as one whole. But the Imagination only brings them together in mere juxtaposition, and has no power *to think* them in their appropriate relations, and so necessarily unite them firmly as one thinkable aggregate. And what assures me that the parts thus reproduced, and put together in Imagination, are the very same parts that I intuited or perceived a moment ago? How can I be sure that the power here at work is the *productive* Imagination, as employed in memory, bringing up actual sensations out of the past, and not merely the *reproductive* Imagination, as employed in pure fancy, building up castles in the air out of dream-intuitions? I must not only unite the parts, but *recognize* them as former units of perception; and *this* Imagination alone cannot do. Such *recognition* is possible only through Consciousness, through a comparison of the two presentations, the one of which was actually intuited a moment ago, and the other is now reproduced as its legitimate represen-

tative. No other power than Consciousness can assure me, as the result of such comparison, that the two are identical. But the empirical or *a posteriori* Consciousness changes from one moment to another, — a Proteus who is never the same for two successive instants. As fleeting in itself as the units of intuition which it witnesses, it cannot certify to their identity. Then there must be another, an *unchangeable* Consciousness, the Consciousness of myself, of my own mental identity, under all the fleeting states of empirical Consciousness which make up my individual being. This Self-Consciousness, which Kant, by a word borrowed from Leibnitz, calls "apperception," is *pure* or *a priori;* for, far from being derived from experience, it precedes it, is a condition of it, for without it experience would not be possible. Experience is the aggregate cognition of objects; and I could not cognize a single object, if this pure and primitive Consciousness were not at hand to aid me in putting together the parts of the "manifold of intuition," by bearing witness to the identity of those parts with the units perceived a moment ago. It bears witness to their identity only through asserting its own identity. Thus the synthetical unity of apprehension, in Kantian phrase, is possible only through the transcendental unity of Self-Consciousness.

Now, this original unity of Self-Consciousness is possible only under the condition, that all my presentations can be attended by the Consciousness "I think;" that is, *I am the thinking person* in this thought. Suppose the series constituting "the manifold of intuition" to be represented by the letters A, B, C, D; and that I have already arrived at the end of this manifold, that is, at the letter D. Now the condition of the synthesis is, that I, who think D, am the same I who formerly thought C, B, and A; and through the thought of this my manifold as unity, *I first become I,* or first *think myself* as the identical in the manifold. I first become conscious of *my own* unity and identity, through thinking the manifold of experience into unity.

This, says Kant, is the highest principle of all exercise of the Understanding, of all Thought; for, to adopt his own language, "the manifold representations which are given in an intuition would not be all of them my representations, if they did not all belong to one Self-Consciousness; that is, as *my* representations, they must conform to the conditions under which alone they can exist all together in a *common* Self-Consciousness; since otherwise they would not all belong to me." The thought that they do all belong to me is, therefore, just the same as the thought, "I unite, or

can unite, them all in one Consciousness." Thus the recognition of my own personal identity, — that the "I myself" remembering at one moment is one and the same with the "I myself" remembered at another moment, — is the foundation of all experience, without which the cognition of a single object would be impossible; for without it, the units making up the manifold constituting that object could not possibly be put together.

Here, surely, is an important and fruitful truth first admirably illustrated and proved by the great Transcendentalist. But with his usual perverse love of system, and bias towards a foregone skeptical conclusion, he proceeds immediately to pull down the edifice which he has just built up. Just as he had before asserted the unreality — the exclusively subjective character, of our intuitions of Space and Time, for the very reason that we cannot possibly believe, or even imagine, them to be unreal — for the very reason that they are *a priori*, innate, primitive, universal, and necessary; so he now, on the ground that we cannot help believing our personal existence and identity, since it is avouched by an *a priori* self-consciousness, without which all experience, all cognition, would be impossible, — on this ground, I say, he asserts that such consciousness exists only in behoof of experience, being a sort of necessary illusion for that purpose, but without any reality as a thing in itself, and without any applicability beyond the bounds of experience. But I cannot dwell upon this criticism now, but must hasten on in order to preserve the thread of connection in setting forth Kant's system as a whole.

But one step more is needed in order to complete this Kantian analysis of the process whereby we cognize any object whatever; and it is a very important step, as it first introduces the action of "the Categories," — those pure *a priori* Concepts which are the Forms of the Understanding, just as Time and Space are the Forms of the Faculty of Sense. The nature and genesis of these Categories are soon to be explained at length; here it is enough to say, that among them are found such Concepts as those of *unity*, *plurality*, *reality*, *substance*, *cause*, etc. Now Kant says rightly, I could not *think* the units of intuition as *mine*, thereby bringing them into a common consciousness, and also unite them into one object of thought and experience, without the aid of such Categories, or Forms of the Understanding, as are here mentioned. For in order to cognize any object of experience, I must think it as *one*, as *real*, as a *substance* in which attributes inhere, as standing to some other object in the relation of *cause* or effect, etc.

What Kant calls the "*Deduction* of the Categories" is the justification of them, or the proof that the use which we make of them in thinking an object is a legitimate, and not an arbitrary, proceeding; just as a lawyer proves his point in court by *deducing* it from some acknowledged legal principle. And such "Deduction" or legitimation in this case is now obvious enough. Thus: without Time and Space, which are the universal and *a priori* Forms of Sense, no single intuitions, as the data or Matter of perception, would be possible. In like manner, without the Categories, which are the *a priori* Forms of Thought, no object of experience, that is, no synthesis of the data of perception into a thinkable whole, would be possible. We are justified, then, in using them so far as to constitute experience, or to render experience possible; but no farther. We are justified in applying them to *phenomena*, that is, to objects as they appear to our minds, but not to *noumena*, or things as they really are.

Strictly speaking, the *object* which we have been speaking of, as constructed by synthesis, is not the individual or singular object, since this is intuited by the faculty of Sense; but it is the Concept, or abstract general idea, of the class to which this individual belongs. The conceived object, or Concept, is thought by the understanding; the perceived object is intuited piecemeal by Sense. We do not *think* this one individual tree or book, but the Concept *tree* or *book* in general, under which this one is comprised. Hence, we *think* an individual object not directly, but only mediately, under a Concept; as when we say, "This one individual thing which I now see *is a tree*;" and only when we are able to say this, do we properly *know* or have a cognition of it. This fact is recognized in common language; for when I see a strange and peculiar object for the first time, not having any previously formed Concept to which I can refer it, I say, "I don't know what this is." But when coming to a familiar object, I say, "Oh, I know this; this is a *tree*." Now, the mental operation of thus referring an individual thing to the Concept, or general idea of the class, under which it belongs, — and of *thinking* it through that Concept, an operation essential to and constitutive of *knowledge* properly so called, — is a Judgment. To adopt Kantian phraseology, — we judge, and thereby know, when we bring the manifold of individual intuitions into the synthetic unity of apprehension, and place it under a preformed Concept lying ready for it in the Understanding.

I would not use this detestable jargon of technicalities at all, if

it were not for the purpose of enabling others to study Kant's writings for themselves. His fondness for it, as his own invention, was his great weakness; and his adoption of it has perplexed and confused for all time, not only his own philosophy, but that of all German metaphysics since his day, corrupted in this respect by his example.

Of course, most of these preformed Concepts thus lying ready in the understanding for individual things to be subsumed under them, are empirical Concepts, derived from experience. I have learned from previous observation, or information derived from others, what tree, flower, book, etc., are; and I am therefore able to *recognize* (*i. e.*, know over again) any individual thing belonging under these Concepts, and thereby to call it by its right name. Though I never saw this individual thing before, I can still say, "I *know* this; it is a book," — or whatever it may be. But we now come to the great problem of Transcendental Logic, and ask ourselves, — Are there, thus lying preformed in the Understanding, any *pure* or *a priori* Concepts, not derived from experience, because, without them, no experience would be possible? The answer to this question will lead to the discovery and complete enumeration of the Categories; but the answer must be postponed a while longer.

What I have thus far explained is Kant's analysis of the act of perception, and his Deduction of the Categories, as set forth in the first edition of the "Critique of Pure Reason," published in 1781. But in the second revised edition, which appeared six years later, these two important portions of his theory are essentially modified, the passages relating to them being almost entirely rewritten. In the preface to this second edition, Kant declares that these alterations do not affect the substance of the doctrines or opinions first set forth, or even the grounds of proof by which they were supported, but were intended solely to remove obscurity in the exposition of them, and thereby to obviate some difficulties and misconceptions to which the want of perspicuity had given rise. But as thus understood, this attempt to improve his work was certainly a lamentable failure; for it is admitted on all hands, that the revised exposition of the theory is ten times more obscure and enigmatical than the form in which it was first propounded. It has led to endless disputes respecting the proper interpretation of Kant's opinions, and some high authorities in Germany, Schopenhauer included, pronounce it utterly unintelligible. Kuno Fischer puts it almost entirely aside, and restricts his analysis of the system

to the first edition. The truth is, as it seems to me, that in the second edition of his work, Kant is endeavoring to answer his critics, who had pushed his premises to certain conclusions which he was by no means prepared to admit. Without openly or consciously shifting his ground, he modifies his language, and rewrites a considerable portion of his work, hoping thereby to refute the inferences and objections of his reviewers. But he succeeds only in impairing the harmony between the various parts of his system, in loading it with ambiguities, and in sacrificing precision and definiteness of statement altogether.

The inevitable conclusion from the principles of the Transcendental Philosophy, said its critics, is a system of Idealism, and even of Egoism or "Solipsismus," — that there is no real existence outside the mind of the thinker. Kant was particularly sensitive about such a charge, and the following passage from his "Prolegomena to every future System of Metaphysics," published only two years after the first edition of his "Critique," is his almost passionate denial of the fairness of the accusation. "Idealism," he says, "consists in the assertion that thinking beings are the only ones, all the other things, which we suppose that we perceive, being only impressions made upon the mind without any real object corresponding to them outside of the thinker. On the contrary, I say, things are given to us as real objects of our senses outside of ourselves, but we know nothing of what these things are in themselves, *per se*, since we know only their *phenomena*, that is, the impressions which they create in us when they affect our organs. Surely, then, I avow that there are bodies out of our minds, and that the word 'body' signifies merely the appearance to us of an object which, though incognizable *per se*, is none the less real. Can this doctrine be called Idealism? Nay, it is just the reverse." He makes a further attempt to fortify this position, by inserting, in the second edition of the "Critique," a long and obscure passage which he calls a "Refutation of Idealism." But he finds it very difficult to satisfy himself on this point, as he gives no less than three distinct versions of this "Refutation" in the same volume, one in a long foot-note to the Preface, and another in a foot-note to the passage as originally inserted in the text. And in spite of these reclamations, I believe every attentive reader of what precedes will agree with me in holding that the inevitable outcome of Kant's theory as a whole, or the conclusion to which the admission of his premises irresistibly leads, is Idealism pure and simple. His noumenon or *ding-an-sich*, is a baseless supposition, a merely arbitrary and in-

conceivable creation of thought. On this point, I agree with Kuno Fischer, and not with Trendelenburg, the two who recently had a long and fierce controversy about it, which was terminated only by the death of one of the disputants.

Kant damaged his work still further in the second edition, when he attempted to retract what he had once affirmed in respect to the unity and identity of our primitive self-consciousness. To this end, he rewrote his "Deduction of the Categories," omitting all that he had said about the necessity of a *recognition* of the units of a manifold by the identical Ego of pure consciousness, and essentially modifying his long chapter on what he calls the "Paralogisms of Rational Psychology." He had summed up his former doctrine by saying that "a threefold synthesis is necessary for any cognition of an object: namely, 1. the synthesis of *apprehending* the several units as modifications of the mind in the act of perception; 2, the synthesis of *reproducing* them in the imagination; and, 3, the synthesis of *recognizing* the same in the concept of the object." But in the confused and obscure version of the same theory in the second edition, we hear no more of this third act of the synthesis; *recognition* is not even mentioned, but a sort of unity is given to the manifold through the consciousness "I think," which necessarily accompanies every act of intuition when it is clearly brought before the mind, since otherwise it would not be known as *my* act. This "I think" is what he now calls "pure and primitive apperception;" but he holds that it is a mere Form of Thought, without Matter, and that it is also a factitious product, being itself generated in the very act of the synthesis of a manifold which it accompanies and renders possible. It gives us no assurance, then, of the real existence of one and the same Ego present in every act of mind.

Thus, in his second edition, Kant says, "only through the process whereby I can unite a manifold of given presentations in *one* consciousness," that is, whereby I throw them into a group presented by a single act of mind, "is it possible that I can bring before myself the identity of consciousness in first receiving these several presentations; and this is equivalent to saying, that the analytical unity of apperception [*i. e.*, the unity and identity of the Ego in successive states of mind] becomes possible only by presupposing a synthetical unity," in which a manifold has been previously united into one whole. And again: "That synthetical unity of the manifold of intuition, which is given *a priori*, is therefore the ground and reason of the identity of apperception itself, which *a priori* precedes all my definite thinking." Formerly,

it was the "unity of apperception" which made the synthesis of intuitions possible, through *recognizing* them as previous states of mind; now, it is the synthesis of intuitions which makes the "unity of apperception" possible. And in either case, the use of the Categories is necessary in order to enable me to think a plurality as one whole.

The process of forming these two factitious units, one of which is the thinking Subject, or the Ego of self-consciousness, and the other is the Object thought, may be thus illustrated. In a series of distinct states of my empirical consciousness, I intuit successively a small spheroidal shape, a yellow color, a peculiar odor, taste, etc., which constitute the manifold of intuition called an orange; and through the same unifying act of the Understanding whereby, with the aid of the Categories, I synthesize the sensible qualities into one Object, I also unite the four distinct Subjects of intuition into the one pure Ego of consciousness, which is now cognized as identical with itself throughout the process; since otherwise the objective synthesis would not be possible. Thus: —

The pure Ego of consciousness, one and identical with itself. = { Ego intuit a spheroidal shape. / Ego intuit a yellow color. / Ego intuit a certain odor. / Ego intuit a certain taste. } = The single object called an orange.

In other words, I "make believe" that I myself am one being, in order to be able to unite several distinct qualities into one object. The theory is intricate, artificial, and pedantic to excess; but the invention of it proves that Kant fully appreciated the importance of the fact, which is too frequently overlooked or forgotten, that the unity and identity of self-consciousness must be presupposed, before even the simplest act of cognition becomes possible. In attempting to avoid the consequences of having admitted this fact, he falls into the error, which, here and elsewhere, is a fundamental one in his system, of degrading Consciousness into a mere species of Sense, calling it the internal Sense, and thereby referring it solely to the *receptivity* of mind, that is, to its power of passively receiving impressions, instead of making it a part of the *spontaneity* whereby the mind reacts upon and modifies its impressions. "We know ourselves only by the internal Sense," he says, — that is, as a succession of distinct states of mind, "and therefore only as phenomena." Herein he exposes himself to a portion of the pithy criticism which he makes upon two of his distinguished predecessors: "Leibnitz," he says, "intellectualizes sensible phenomena; Locke sensualizes the concepts of the understanding." Kant him-

self does worse than Locke, for he sensualizes Consciousness itself.

The radical difference between the two faculties is easily pointed out. The sole function of Sense, properly so called, is passively to receive impressions made upon it from without, these being only effects, or at best, images, of something external, something which is at any rate distinct from ourselves. This "something," which is their source or prototype, is not cognized directly and in itself, but is known vicariously through representations of it in the mind; and these representations of it are therefore properly called phenomena, or mere appearances. But Consciousness directly and immediately apprehends Self as the thing itself to the existence of which it testifies. It presents to us, not merely certain states of the Ego, but the Ego itself as existing in those states. It witnesses and reports, not so much the manifestation, as the thing manifested; not the abstract *cogitatio*, but the concrete *ego cogito*; not merely *volition* or *hunger*, but the compound facts, *I will* and *I am hungry*. For is it not evident, that either of these states of mind would be nothing to me, if it were not known at the moment to be a state of *myself*? Hence, every conscious state is a distinct phase of *self*-consciousness.

It is further evident that Consciousness, unlike Sense, belongs to the spontaneity of mind, because it becomes vivid and keen when the attention is roused, but flags and dies out when monotony and weariness prevail. When fatigued and sleepy, conversation or music passes unheeded; yet both must be heard, for the merely passive Sense must receive whatever comes. Kant's ingenious but far-fetched theory, that the identity of the self-conscious Ego in successive mental states is a mere fiction of thought, produced by the same unifying act whereby several qualities are grasped together into one object, is sufficiently disproved by the simple fact, that we are distinctly conscious of the unity and identity of Self as far back as memory extends, when we pass in review many acts of mind, which are not united into one object, but are divided among a multitude of interesting scenes and events. The phenomena reviewed are multiform, but they are all witnessed and attested by one and the same Self, as portions of its own experience. This fact is so evident and striking that, while still discussing the intricate theory now in question, it forces Kant to contradict himself by making this plain admission: "My own existence indeed is not a phenomenon, and still less is it a mere illusion." Then it must be a noumenon, or *ding-an-sich*, — the very truth for which I am here contending.

We must now follow Kant in his detailed exposition of the nature of the Categories; and to this end, we again take up the question, whether, among the Concepts under which individual intuitions are subsumed, there are not some which are pure and *a priori*, lying preformed in the Understanding, and which are not derived from experience, because without them no experience would be possible.

We are able at once to reply,—Yes; there is at least one such *a priori* Concept; namely, Cause, and its correlative, Effect. All, both physicists and metaphysicians, both Transcendentalists and Positivists, now admit with one voice, that we have never had experience in the material universe of a true Cause, so that we could know it as such, and distinguish it from a totally different thing, though often confounded with it, namely, an invariable antecedent. Yet even Hume and the Positivists would readily admit that we have a Concept of Cause, *i. e.*, an abstract general idea of it; since otherwise, they could not pronounce, as they do so dogmatically, that no true Cause ever has been, or ever will be, discovered. They must know very precisely what that is which, they say, is thus undiscoverable. Perhaps, if they were better logicians, they would explain how it is that they obtained this idea, though they have had no experience from which it could be derived, and though they declare with undoubting confidence, that all our knowledge comes from experience. Till they do this, till they explain how they got the idea of Power, which is a necessary element in the idea of Causality, I must be content either to believe with Kant, that it is a pure Concept *a priori*, lying preformed in the Understanding, or to maintain that it comes from internal experience, from self-consciousness of my own Power to will. As to getting it indirectly through explanation by words, we need only observe that Power is a simple idea, and, as such, can no more be communicated by words than we can teach a congenitally blind person what the sensation is which we call a blue color.

But Kant is not content, as he says, to pick up at hap-hazard, after long search and trial, a few Concepts *a priori*, like that of Cause; for if thus obtained, we could never be sure that the list of them was complete, or that they were arranged in order, so as to form a systematic whole. With his usual fanaticism for system and completeness, he insists that there must be a principle and a ready prepared rule, according to which *all* may be discovered, and its proper place be assigned to each, thus leaving nothing to choice or chance. Such a principle results from what has now been ex-

plained, that all the operations of the Understanding, both in forming Concepts and subsuming individuals under them, may be reduced to Judgments, "so that the Understanding may be described as the faculty of judging." Then, all *a priori* Concepts, which come from the pure Understanding without the aid of experience, must be equal in number, and correspond perfectly, to the *pure* Judgments that we can form; in short, they must *be* those cognitions which we can have about the mere Form of a Judgment, without considering its Matter; in other words, those which relate merely to *the act of judging*, irrespective of what we are judging about; since the Matter, or what we are judging about, is all that is furnished by experience. These necessary Logical Forms, of course, enter into and help to constitute every act of judgment whereby I *think* any object of experience, either in itself, as a manifold of intuition grasped together into one whole, or in its necessary relations with other phenomena, as their cause, effect, substance, attribute, etc. When thus employed, they are "the Categories," or the several *a priori* Concepts under which phenomena must be subsumed, in order that we may think the synthesis of these phenomena to be objectively valid for all experience. Now, the science of pure logic tells us how many things can be thus determined about the mere act of Judging considered simply as such, or irrespective of its Matter, which may be designated for this purpose by mere letters of the alphabet, as in algebra; since these letters stand for any Matter whatever, — that is, for no matter at all. Then the Judgment or the equation must hold true, whatever value we assign to *a*, *b*, *c*, *d*, etc., even if we make them equal to zero, — *i. e.*, reduce them to nothing. Logic tells us we may, in this manner, determine, first, the Quantity of the Judgment, whether it includes *all*, *some*, or *one* of the objects included under a Concept. Secondly, we may determine the Quality of the Judgment, whether it *affirms*, *denies*, or *denies under the form of affirming*. Thirdly, we may determine the Relation between its two Terms, which must be either *Categorical*, *Hypothetical*, or *Disjunctive*. Fourthly, and lastly, we determine its Modality, as either *Problematic*, *Assertoric*, or *Apodeictic*. In this manner, we can answer the four questions which may be asked about any Judgment whatsoever, irrespective of its Matter; namely, *Quanta? qualis? quæ? quomodo?* Thus we have a table of twelve possible forms of Judgment, distributed into four classes, three in each. And corresponding precisely with these, because deduced from them, we have a table of the twelve *pure* Concepts of the Understanding, applying *a priori* to objects of

intuition in general, — that is, to all of which we can possibly have experience, or which exist in Space and Time. These last Kant denotes, by a term borrowed from Aristotle, the Categories. If we *think* an object at all, that is, if we reduce any manifold of intuition to synthetical unity of apprehension, we must do so under one of each of these four classes of Categories.

The complete Table of these Logical Forms, with their corresponding Categories, may be thus presented: —

Logical Forms.	*Formulas.*	Categories.
1. *Quantity.*		
Singular.	This A is B.	Unity.
Particular.	Some A are B.	Plurality.
Universal.	All A are B.	Totality.
2. *Quality.*		
Affirmative.	A is B.	Reality.
Negative.	A is not B.	Negation.
Infinite.	A is non-B.	Limitation.
3. *Relation.*		
Categorical.	A is B.	Substance and Attribute.
Hypothetical.	If A is B, C is D.	Cause and Effect.
Disjunctive.	A is either B or C.	Reciprocity (Action and Reaction).
4. *Modality.*		
Problematic.	A may be B.	Possibility — Impossibility.
Assertoric.	A is B.	Existence — Non-existence.
Apodeictic.	A must be B.	Necessity — Contingency.

We need not criticize this Table further than to say, that Kant's fondness for system, and his determination to make out a complete correspondence between logical forms and metaphysical concepts, evidently led him astray so far as to make the second Category under the head of Modality, Existence and Non-existence, a mere repetition of the first and second, Reality and Negation, under the head of Quality.

He remarks that the four classes may be ranked into two divisions, the first of which contains the *mathematical* Categories of Quantity and Quality, both of which belong to any object of experience when considered separately or by itself; while in the second division are found the *dynamical* Categories, under which two or more of these objects are thought, when they are viewed in their relations either to each other or to the understanding which thinks them. Hence, those in the second division have correlates, while those in the first have none. Also, the third Category in each class always arises from a combination of the first with the second. Thus, Totality is nothing but Plurality regarded as Unity; Limitation is Reality combined with Negation; Reciprocity is Substance considered both as acting and acted upon, or as Cause

and Effect at the same moment; and Necessity is Existence which is determined to be such merely by the Possibility of its Existence, or which must be, if it be not self-contradictory.

The Categories, since they are pure, are *judging* Concepts; while those of empirical origin are *representing* Concepts. Thus, in applying the Category of Cause, I do not form or bring forward any new object of thought, but take two previously formed empirical Concepts, and *judge* that the one is the Cause of the other. Thus, the vulgar, having framed from their former experience a cognition of what fire and heat are, *judge* that the former *causes* the latter. The function or office of the Categories, then, is not to present objects, but to unite presentations. Objects are given to us by intuition, but never the union or synthesis of these objects. A *necessary* union must depend on the mere Form of the Judgment, after we have abstracted its Matter, which is of empirical origin, and is therefore contingent. Kant distinguishes subjective from objective judgments by denominating the former Judgments-of-perception, while he calls the latter Judgments-of-experience. Thus, to take his own example, my judgment that "this room is warm" is merely subjective; for it is not necessarily true for another person, to whom it may appear cool, nor even to myself at another time, when the air is still warmer out of doors. This, therefore, is merely a Judgment-of-perception. On the other hand, the scientific Judgment-of-experience will so connect phenomena that the union of them shall appear universal and necessary, — true not only for me, but for all mankind, and for all time. An objective *phenomenon*, it may be remarked, is one which I represent as external to myself — that is, as existing in space. But an objective *judgment* is one that is not peculiar to myself, but must be shared by all persons, since it results necessarily from the action of the human mind. What then must be added to a merely subjective Judgment-of-perception, in order to convert it into an objective Judgment-of-experience?

Kant says, the judgment that "the sun warms the room" acquires objective or universal validity, and thereby becomes a Judgment-of-experience, through being subsumed under the Category of Cause and Effect. In this case, the union is a necessary one, and therefore universal; for if the sun is conceived to be the Cause, the warmth *must* follow as its Effect. Since the Categories are those forms in which pure consciousness unites the manifold of intuition, they are the conditions under which the phenomena are so united, and therefore they are the rules or laws of this union. Ex-

perience gives us no case of a *necessary* union between two events; all its connections are contingent, depending merely upon habitual antecedence and consequence. Though light has succeeded darkness every day since the creation of the world, it may not so succeed, the sun may not rise, to-morrow. Then, how came the Understanding ever to think of such a necessary connection? Because, answers Kant, it has the pure or *a priori* Form of Thought, the second Category under the head of Relation, which is the Hypothetical Judgment, "If A is B, C is D." Here, the consequent, C is D, follows *necessarily* upon its ground or reason, A is B. And this is the very Form of the causal judgment. When we conceive the shining of the sun as the Cause, then the warming of the room *must* follow as its Effect.

An Intuition evidently gives us no knowledge, except of its own existence, until it is thought in relation to its object, or rather to a Concept of that object; that is, it would be merely a subjective affection of my mind, if it were experienced without any relation to the object to which it belongs, or to the source whence it comes. An Intuition of a fragment of color, *green*, for example, gives me no knowledge, till I refer it either to a spot of extended surface, say, foliage or grass, whence it came, or to a Concept formed from previous experience, of *color* in general, or even to a subjective source in some morbid affection of my nerves or organ of vision. Now, all Intuitions come from experience; or if you say, Space and Time do not thus come, because they are *a priori* Intuitions, I answer, that both Space and Time are completely void and indeterminate till they are constructed by the Imagination into some definite shape or quantity, say, a triangle or a circle, a minute or an hour. Then we must always find an object or a Concept to which a given Intuition may be attached.

The next instance of the application of the Categories may be taken from that conception of the relation of attributes to a substance, which is a necessary part of our concept of any material object whatsoever. According to what has just been said, an intuition of any quality, *weight* or *hardness*, for instance, would give me no knowledge, except it is thought in relation to its object, *i. e.*, to the Substance in which it inheres. But the senses tell me nothing about Substance. I cannot even think it, except in relation to its attributes; and I cannot think the attributes as attributes, except in relation to the Substance. Each is thought only in and through the other. Evidently, then, what is here thought is a *relation*, and as such, it must be the work of the Understanding; it cannot

be perceived by sense. Then whence comes the Concept of this relation, which is certainly objective or universal, since every mind *must* think hardness, weight, color, etc., as inherent in some *substance* or thing; and further, too, that it is only the *attributes* which change and pass away, while the Substance is unchangeable and indestructible? Kant answers, that there must be an *a priori* Form of this relation in the Understanding, or rather in the *pure* Consciousness, free from any empirical element, which first grasps together into unity the manifold of intuition and the Forms of the Understanding. He finds such a Form of Judgment in general in the Table of the Logical, *i. e.*, the *pure*, Forms which he has identified as the Categories,—namely, the first of the third class, Relation, the categorical relation of a Subject to its Predicate. A is B; snow is white; water is fluid; iron is malleable. Always this is the relation, this is even the meaning, of Subject and Predicate, that the latter inheres in the former, the former underlies the latter. Aristotle defines the Subject of a proposition as τὸ ὑποκείμενον, that which lies under the Predicate, conditions it, and so is Substance; while the Predicate, as a Mark or Accident, determines the Subject, *i. e.*, inheres in the Substance. If change takes place, if ice becomes water, or water becomes steam, still it is only the attributes, fluid, hard, or aeriform, that change; but the subject remains subject, the substance is unchangeable, not an atom of it is lost or created. Surely, we have no experience of this last mentioned fact, but we necessarily assume it.

Let us take the next instance in the reverse order. The pure logical form of the Disjunctive Judgment, A is *either* B or C; to which Category does this correspond? Suppose that A is B; then A is not C. Suppose A is *not* B; then it *is* C. And *vice versa.* This is a very peculiar case; B is at once the Cause and the Effect of C; C is at once the Cause and the Effect of B. Evidently this is the Category of reciprocal action, or mutual action and reaction, which is assumed as an axiom in mechanics, though experience certainly cannot teach us that it must be so.

Take the next case from the second Table, that of the difference in Quality, according as Judgments are either Affirmative, Negative, or Negativo-Affirmative, or Infinite, as Kant chooses to call them; because, by saying A is not-B, John is not-strong, I may make an infinity of other judgments respecting John, observing merely this one limitation, that strength be not attributed to him. Evidently these three Forms of judging are the foundations of the three Categories of Reality, of Non-Existence or

Unreality, and of Limited Existence. Things in themselves or as they really are, Noumena, lying beyond or behind the phenomena or mere manifestations to sense; — are they realities, or unrealities, or a merely negative idea, what is not manifested? Experience cannot tell us; but we surely know what we mean when we ask the question. What is Existence? Define it, if you can, without mere tautology. Hegel says, it is nothing.

Here, again, we observe the intermediate position of the Critical Philosophy. The Empiricists maintain, that we have no knowledge antecedent to experience; that we first perceive, through the senses, the individual objects and events which are presented to us, and from these data, by the way of analysis, abstraction, and generalization, we obtain our simple and general conceptions of substance, unity, existence, space, etc. Not so, says Kant; what you call a datum of experience is a complex, a manifold of intuition and of *a priori* forms of the understanding; and you could not have any experience, you could not *know* any object or event to be what it is, if you had not previously possessed the elements out of which it is constituted, and had not put these together in the synthesis of pure consciousness, according to the necessary laws of the understanding. You ought first to show, what you cannot do, how experience is possible without the aid of the very elements which you vainly pretend to derive from experience. Your process is a ὕστερον πρότερον, a putting the cart before the horse. You derive the parent, the conceptions of *substance*, *cause*, *unity*, etc., from the child, — experience of objects; forgetting that these conceptions are needed to generate that experience; for, without them, you would have only a manifold of intuition, a multitude of units, or single and consecutive impressions on sense, without any power of grasping them together into one thinkable whole.

On the other hand, he maintains, against the Dogmatists, that these *a priori* elements are mere empty Forms of Thought, which have no significance or utility till they are filled up with the perceptions of sense, thus constituting objects and events which can be only empirically known. Thus they aid to constitute experience, but give us not the slightest information respecting that which lies beyond the limits of experience. They have no meaning or applicability beyond the world of phenomena, of that which appears. We must *think* according to the Categories; but that is no proof that things are what we necessarily conceive them to be. Granted that when I have sensations of color, weight, hardness, shape, etc., I must *think* a Substance under them, in which they are united.

Still, I have no intuition of this Substance; I can perceive only its qualities. The Substance, then, is unknowable; it is a mere *ens rationis*, Form without Matter, a mode in which I must think the sensations as qualities, that is, as constituting an object.

We are now able to answer the second question involved in Kant's fundamental problem, namely: How is a science of *pure* Physics possible? That is, how are we able, independently of and anterior to any experience, to affirm certain universal fundamental principles, on which the whole of empirical physical science is based, and without which no progress in such science would be possible? The answer is, we are able to posit them through the Categories, through which, as *a priori*, and therefore universal and necessary, laws or forms of pure Thought, we must think every object of experience. Every object of external intuition, in order to be conceived or thought, must be subject to the universal laws of thought. Hence we are enabled to affirm beforehand, and antecedent to any experience, that every external object must be apprehended both quantitatively and qualitatively; — that is, under each of the first two tables of the Categories; it must be apprehended as an *extensive* magnitude, as so many superficial inches, feet, yards, acres, etc.; and it must be thought as an *intensive* magnitude, that is, as possessing one *degree* or another of hardness, consistency, weight, color, etc., which are only names for certain qualities conceived as existing in bodies corresponding to certain sensations in our minds. Again, under the third table of the Categories, it must be conceived as a Substance in which these qualities inhere; and we must think that this substance persists or endures, any change affecting only the qualities; and, therefore, that the quantity of this substance cannot be increased or diminished by a single atom, whatever may be the transformation of its qualities. Again, any change taking place even in the qualities, must be apprehended under the Categories of cause and effect, and of action and reaction; that is, we know, *a priori*, that every change is necessarily an effect of a preceding change, and a cause of a subsequent change, and that, in every application of force between coexistent objects, action and reaction must be equal. So, also, under the fourth table, every object of experience must be conceived as a possible, an actual, or a necessary object.

Summing up, we say, as Time and Space, the *a priori* forms of the Intuitive faculty, the Sense, render pure Mathematics possible, so the Categories, which are the *a priori* forms of the Un-

derstanding, under which alone any object of experience can be conceived as existing, render pure physical science possible.

Our abstract of Kant's Transcendental Logic, or analysis of the *a priori* functions of the Understanding, would be very incomplete if we omitted to explain his system of *Schematism*, which is his theory of the machinery through which the Categories, which are the *a priori* Forms of Judgment, *become capable* of application to the empirical intuitions of sense. A bridge is necessary to form the junction, and we must show how this bridge is constructed. The Deduction of the Categories proved that the application of the Categories to the manifold of intuition *is legitimate;* the doctrine of Schematism shows *how* this application takes place.

The union of Matter with Form, of the receptivity of sense with the spontaneity of thought, does not, whenever Matter is presented to us through sense, take place arbitrarily, by a sort of spontaneous agglutination of the two factors. Human consciousness is not like a cupboard with diverse compartments, which opens as often as there is anything to put into it, and in which every thing, unguided, finds at once its appropriate place. When our power of imagination forms a systematic whole by uniting units of sensation into objects of experience, it proceeds regularly, according to certain primitive fundamental laws or principles. The human mind may be regarded as a great living organism, which does not simply bolt its food, but digests and assimilates it; — forms part of it into muscular fibre, part into cellular tissue, part into nerve and brain, part into bone, etc. The manifold of intuition is only the undigested food, the nutritive elements coming from without; Schematism is the process of digestion and assimilation; the Categories are the distinctive *forms* of nerve-fibre, cellular tissue, skin, bone, etc., into which the food is ultimately worked up. The Imagination, indeed, adds no new forms, but applies the Forms or Concepts of the Understanding to the matter of sensible Intuition, and thereby fashions the latter into objective knowledge. The Imagination, according to Kant, is a sort of intermediate link between the Faculty of Sense and the Understanding, forming a bridge of connection between them. It is closely allied with Sense, because we can imagine only the Intuitions of Sense; and it is allied with the Understanding, because, like that faculty, it performs a synthesis, or unites those Intuitions.

The Categories are the rules of science relating to experience, just as Grammar contains the rules of language: *things* are the objects of the former, *words* of the latter. But then we must know

how to apply the rules, or rightly to subsume cases under them. When the phenomena and the rules or Concepts are homogeneous, both being empirical, there is no difficulty. Having the empirical Concept or rule of *man* in general, I know how to put together the units of intuition which make up my cognition of an individual man, say, John or William. I can judge that man is biped, is bimanous, is upright in gait, etc. But when the rules are the Categories, and so are heterogeneous with the phenomena, these being empirical, while the former, the Categories, are *a priori*, we need middle terms — *schemata* or bridges — to unite them. How can I judge the sun, that it is the cause of warmth, when I have no direct sensible perception of causality? How can I judge that the substance of the water is unchanged, though its attributes are changed into those of ice or steam, when I have no immediate perception of Substance, apart from its qualities? I need a middle term, or bridge, something which is sensuous or empirical in one aspect, and thus homogeneous on one side with the things of sense, and yet *a priori*, and so universal and necessary, in another aspect, thus approximating on the other hand to the nature of the Categories. I need the aid of the productive Imagination, in part to sublimate and purify the intuitions of sense, in part to sensualize the Categories, under an image, or something like an image, and thus to approximate the two factors of knowledge to each other. A Schema is not an image, but is a rule or law indicating the process through which an image, if it were possible, would be formed. Thus, a small number, as 5, can be presented in an image of five distinct dots; but a larger number, as 97, unpicturable in itself, because the imagination cannot distinctly grasp so many dots, can be thought as a continuation of the process, the successive addition of units, through which the number 5 was presented. Hence, though we cannot directly image *cause*, *substance*, etc., we can represent figuratively the process of forming such an image, and thus give a sort of diagram of the Concept. This diagram is the Schema. Such a Schema, for all the Categories, is Time, which, as the universal form of the internal sense or empirical consciousness, is the vehicle through which all objects of sense are conveyed to us; they must come to consciousness one after another, in successive moments of Time. Time constitutes the bridge that we need; for, as an *a priori* intuition, a universal though empty form of consciousness, it is homogeneous with the Categories; on the other hand, as an intuition, as contained in every empirical presentation of the manifold, it is homogeneous with the

phenomena of sense. Time has Duration, Succession, and Simultaneity as its forms; and through modifications of these, it schematizes all the *a priori* Concepts of the Understanding.

Thus, the pure Schema of Quantity, the first Table of the Categories, is *Number*, which is a mere form of Succession, created by the continuous addition to each other in Time of successive units, thus serving to determine the *quantum* — how much — of all objects presented either in Space or Time. The manner in which the mind adds the successive moments, so as to constitute a definite portion of Time, say, an *hour*, schematizes the way in which it groups together the units of intuition presented in those moments into a conceivable whole. The *a priori* fundamental principle of this schematization is enounced by Kant as the "Axiom of Intuition," namely, "All Intuitions are extensive Magnitudes." Such magnitudes are all the objects of Geometry and Arithmetic, these having to do only with pure Quantity, without any reference to Quality. "Every thing intuited is extensive;" hence it is divisible, and divisible *ad infinitum*. Nothing indivisible can be perceived. In other words, atoms can never be phenomena, never can be objects of possible experience.

On the other hand, Quality, the second Table of the Categories, indicates the diversity of sensations, each of which has its own degree, reality or affirmation signifying being or existence in Time, while unreality or non-existence is the sensation reduced through successive stages of faintness to zero or nothing. Evidently the difference of the two is the difference between Time filled or occupied with sensation, and Time empty.

The fundamental principle of the Categories in this Table is the "Anticipation of Perception," that "in all phenomena, the Real, which is an object of sensation, has *intensive* quality, or is capable of degrees." The number of degrees is infinite, as the sensation may be gradually diminished to any tenuity, but can never become absolutely null, without ceasing to be a sensation. Hence the rule, that there cannot be either an empty Time or an empty Space, though we arbitrarily assume any very low degree of it to be nothing, and then designate it negatively as Unreality or Non-existence. Thus, the warmth of the room may be gradually diminished, till we say it is not warm at all; it is cold. The weight of a given volume of atmospheric air may be gradually reduced, as in the receiver of an air-pump, till we call it nothing. But every one knows an absolute vacuum to be impossible. This is the meaning of Leibnitz's law of Continuity.

These two tables are called by Kant *mathematical*, since the Categories contained in them are the ground of mathematical mensuration of all objects having quantity, either of space and time, and quality, or degrees of sensation. Their fundamental principles are said to be *constitutive*, because they suffice to constitute objects of perception as having a given quantity and a determinate quality. The other two Tables of Categories are called *dynamical;* as they regulate our notions of *force*, *action*, and the grounds of difference between *possible*, *actual*, and *necessary* results of the combination of mechanical causes, they are the metaphysical basis of the science of pure Physics, especially of that department of this science which we call Mechanics. Their fundamental principles are not constitutive, but merely *regulative*, since they only give us rules for determining the relations of one object to other objects previously constituted.

There are three of these regulative principles, called "Analogies of Experience," for the third Table of Categories, that of Relation. The Schema of the first of these is the perdurability, the unchangeableness, of Time itself, as contrasted with the constant flux of phenomena, the incessant changes of things, which take place *in* Time. Time changes not, and produces no change. Time does not crumble man's works to dust, wear away even the mountain's side, change our hair to gray, dry up our affections, but only causes and agencies which are at work in Time; such as meteoric forces, the attrition of falling water, chemical or mechanical solutions of continuity and complexity, human passions or sloth. Evidently we have here the Category of Substance, as the permanent and unchangeable, underlying all the phenomenal mutations of its attributes or qualities. This first Analogy, enounced as a fundamental principle, is thus expressed: "In all changes of phenomena, substance is permanent, and the quantum thereof in nature is neither increased nor diminished." Amid all changes, whether mechanical or chemical, say our physicists, not an atom of matter is annihilated, not one new atom is created. *Nihil gigni, nihil in nihilum revertere potest.*

But how do the physicists prove this dictum by their favorite method of observation and experiment, instead of referring it, as is here done, to an *a priori* principle? Mere inductive science here utterly fails to establish its point. Unless we assume this law beforehand, no chemical or physical investigation by experiment is possible; and therefore the law itself is unprovable, since the only possible proof of it would be by experiment. For instance: we

could not prove by experiment that certain alkalies are metallic oxides, if we did not previously assume that the substance of the alkali could not possibly be annihilated in the course of the experiment, and the two new substances, oxygen and a metal, be created at the same time to take its place. The accidents change, but the substance persists. Hence, various material substances differ from each other, not in their substance, — every atom of which is conceived to be perfectly like every other atom, — but in their accidents or qualities. For example: it is the same substance which is — now, carbon, oxygen, and hydrogen; now, these united in vegetable tissue; now, after being eaten and assimilated, animal tissue; and finally, carbon, oxygen, and hydrogen again. Mere experience, uninformed by the *a priori* laws of the Understanding, could only lead us to the conclusion, that, at each of these changes, the previous substance was annihilated, and the new one created. Yet we instinctively and instantly reject this conclusion. Why? The chemist says, because we find by experiment that one of the accidents, namely, the aggregate weight, remains unchanged. Be it so; what then? This would only prove, that whatever number or amount perishes, the same amount of substance is created anew, not necessarily that the same numerical or identical essence persists or endures. Besides, why infer identity from the one accident, weight, which persists *in amount*, rather than difference from the many others, volume, color, texture, consistency, chemical affinities, etc., which undergo great change? As all scientific investigation proceeds by analysis and synthesis, and so depends on this law, I say inductive science is impossible, except through the previous assumption of an *a priori* principle, which, far from being founded on facts, appears directly to contradict facts.

This general doctrine of the "Critical Philosophy," therefore, seems to me to rest on an impregnable basis. But I would refer it to a different analogy from that to which Kant traces it. Instead of attributing it to the persistency of time itself, which endures, while phenomena *in* time change, I think it depends rather on the original fact of apperception, — that is, on the instinctive and necessary recognition, in pure consciousness, of the continuous identity, the unchangeableness, of myself, under all the phenomenal changes of thought, feeling, and outward manifestation. Infancy, manhood, and old age are but different stages in the existence of one and the same being, whose unity and continuity are attested by pure consciousness. The child is more than father of the man; he is the man himself, his unfolding or devel-

opment from the one stage to the other being only a series of phenomenal and *quasi* outward changes, witnessed from within by the same persistent Ego, which really never changes or dies. Still farther: — we must have a persistent basis, before even the idea of change becomes possible, that is, before we can know what a changeable phenomenon is. For change, according to a law of thought that has been already explained, cannot be conceived or known except through its contrast with not-change; just as motion can be perceived only by comparison with that which is at rest. The flow of the river is ascertained only by reference to the immobility of its banks. The fleeting thoughts and other affections of my own mind would be nothing to me, if they did not flow past the fixed point of consciousness, the Ego that endures, the silent witness which beholds all change, but itself changes not.

This is the proper place for considering the obscure passage, first inserted in the second edition of the "Critique," which Kant denominates a "confutation of Idealism." I am not sure that its meaning can be made clear, for the commentators generally make little mention of it, seeming to regard the argument which it contains as inconclusive or unintelligible. In order that the reader may judge for himself, I translate as literally as possible Kant's own statement of the reasoning.

"THEOREM. *The mere consciousness, empirically determined, of my own existence proves the existence of objects in space outside of me.*

"PROOF. I am conscious of my own existence as determined in Time. But all determination in Time presupposes something permanent [or perdurable, *etwas Beharrliches*] in perception. But this *permanent* cannot be something *in me*, for only through this permanent can my own existence in Time be first determined. Therefore, the perception of this permanent is only possible through a *thing* outside of me, and not through the mere *mental picture* [*Vorstellung*] of such a thing. Consequently, the determination of my own existence in Time is possible only through the existence of real things which I perceive as external to myself. But consciousness in Time is necessarily connected with the consciousness of the possibility of this determination of Time; therefore, it is also necessarily connected with the existence of things outside of me, as a condition of the determination of Time; that is, the consciousness of my own existence is, at the same time, an immediate consciousness of the existence of other things external to me."

This is enigmatical enough, though Kant boasts that the argument here presented effectually turns the tables upon the Idealists; for they assume, that the only immediate experience is internal, and from this, that we can proceed only *by inference* to external things. "But it is here proved that external experience is properly immediate, and only by its means does internal experience (that is, not indeed the consciousness of our own existence, but the consciousness of its determination in Time) become possible."

As the first step towards understanding this obscure argument, let us inquire what Kant means by our existence being "determined in Time." He means, that it is so determined only when a *change* takes place in the mode of its existence; for *change* cannot be cognized except by perceiving one state of a thing to be *anterior* to its *subsequent* state. To quote his own words, "we can perceive a determination in Time only through a change in external relations (movement) to the permanent in space; for example, the movement of the sun in relation to fixed objects on the earth." A consciousness unbroken by the occurrence of any change in its condition, as in a swoon, is insensible to the lapse of time, and, of course, cannot assign existence to any one moment during the swoon rather than to another. But I am conscious of my existence only as a constant succession of distinct mental states, *i. e.*, as a series of changes; and I determine my existence in time, when I assign it to the moment when one of those changes took place, — say, when I had a headache yesterday forenoon. Now, it has just been proved that *change* is only of the attributes of a thing, and can be cognized only through its contrast with the unchangeable, that is, with Substance, with what is *permanent* in perception. Hence, I can be conscious of my existence as determined in time, or as a succession of changing states of consciousness, only through perceiving something which is perdurable and does not change.

So far, the reasoning is sound. But then the question arises, what is this "something permanent," *etwas Beharrliches*, in perception? Kant says, it cannot be "something *in me*," for only by its means can the existence of a "me" be determined in time. Then it must be something *out of me;* that is, I can cognize my own existence only through an immediate consciousness of external substance. On the contrary, as has been said, I maintain that the something permanent is *in me*, and that the fleeting phases of my mind are recognized only as they drift past the fixed point of

consciousness, the perdurable Self, which remains one and the same throughout.

Seemingly not more than half satisfied with his own reasoning, Kant modifies it essentially in a foot-note. Here, he says, the question as to the possibility of an immediate consciousness of the existence of external things really stands thus: "Have we an internal sense, but no external sense, only an external imagining? But it is clear, that, in order only to *imagine* something as external, that is, to represent it to the sense in intuition, we must first have an external sense, and thereby be able immediately to distinguish the mere *receptivity* of an external impression on our mind from the *spontaneity* which characterizes every imagination. For, merely to imagine an external sense would be to destroy the faculty of perception itself, which [on this supposition] is to be constructed by the power of imagination." Here is the secret of Kant's aversion to Idealism. At the outset, from the very beginning of the "Critique," he had assumed without proof, for indeed the assertion needs no proof, that the mind has originally a power of clearly distinguishing its mere receptivity from its spontaneity, its external from its internal states, and hence, of separating what comes to it from without from that which is created within. Pressure and counter-pressure, my own voluntary thrust and external resistance to that thrust, Myself acting and a Not-myself reacting, are *both* distinctly cognized by me in one and the same act of consciousness. In truth, either one of them cannot be known except through its contrast with the other. Herein, Dr. Reid and Kant and Sir W. Hamilton are at one, — in the doctrine of "an immediate consciousness of the existence of external things," those "things," however, being, not Matter, but Force. But whether this doctrine is consistent with other portions of Kant's theory, or not, the reader may judge for himself. From this digression I now return to the exposition of Schematism.

The Schema of Causality, the second Category in the table of Relation, is the fixed relation to each other of the *successive* moments in the flow of Time. To express it roughly, nine o'clock in the morning can come only *after* eight o'clock, and only *before* ten o'clock. Any alteration of this order is inconceivable. And what is this but the *causal* relation, which is necessarily conceived by us as *prius* and *posterius* in a fixed order? The Cause is that which necessarily precedes the Effect; the Effect is that which necessarily follows the Cause. Experience tells us nothing either of the fixedness, or the necessity, of this order; for, to the ap-

prehension of the senses, cause and effect are not successive at all, but simultaneous. And so far as experience goes, there is no necessity in the case at all, but only a frequent conjunction of two events, which, though witnessed a thousand times, may be dissolved the next time that one appears. The parts of any other manifold, argues Kant, of a house, for instance, may be apprehended in any order, from top to bottom, or from bottom to top, from right to left, or *vice versa*. But if A is apprehended as Cause, and B as Effect, the order is always AB, never BA. How do the Empiricists account for this, whose oft repeated maxim, that Causation is nothing but the constant conjunction of two events, leaves us entirely at a loss whether the physical phenomenon causes the psychical, or the psychical causes the physical; whether the paleness produces the fear, or the fear the paleness; whether the volition raises the arm, or the raising of the arm excites the volition? But even a Positivist will admit, that every instant of Time is conditioned by all the preceding instants, so that it cannot change places with any one of them; and also, that our conception, however it may be with our observation, necessarily presents Cause and Effect in the same unchangeable order. The principle of this schematization, though hardly necessary to be enounced, is, "that all changes take place according to the law of the connection between Cause and Effect." And here we have another proof of Leibnitz's law of Continuity; that, as the succession of Time is one of unbroken continuity, proceeding uninterruptedly, by steps infinitesimally small, up to any given amount, say, an hour, so the change induced by any Cause, since it is conceived through this succession of Time, is also necessarily conceived as continuous or without break. This is usually expressed as the law, *nihil fit per saltum;* Nature never acts by jerks. Even the cannon ball, when fired off, does not jump from a state of rest to one of high velocity, but passes, though very quickly, through all the intermediate degrees of motion, even the slowest. Certainly experience cannot avouch this fact, since the successive changes are altogether too quick to be perceived by sense.

The Schema of the third Category in the Table of Relation is that of *simultaneity* in Time; just as *duration* was that of Substance, and *succession* that of Cause, these being the only three conceivable Modes of Time. The principle of this Schema of simultaneity is, that "all substances, so far as they exist in space at the same time, reciprocally act on, and mutually determine, each other." For, the objects A and B, if coexistent, may be per-

ceived indifferently, either in the order AB, or in the order BA; that is, A no more determines B than B determines A. They reciprocally determine each other. Because the earth and the moon are coexistent, the moon attracts the earth just as much as the earth attracts the moon. Conceived as coexistent, every substance in the universe acts on every other substance, and every other substance acts on it. This is only the law of gravity. Only pure reason can establish this law; since we have experience, through direct observation, only that the equilibrium or statical condition exists; but not what balance of forces produces this equilibrium, since force cannot be observed at all.

Having said enough to explain Kant's theory of Schematization, I must pass very rapidly over its application to the three Categories of the fourth Table. These do not determine the object, but only the nature of my cognition of the object. For, supposing the object to be already fully determined, I may still ask myself whether I know it as only a *possible* object, or as a *real* existence, or, if *real*, whether it is also *necessary*. The three fundamental principles for this Table, called by Kant the three "Postulates of Empirical Thought," may be thus expressed: —

1. Whatever can be conceived as an object capable of being intuited *at any time* is *possible*.

2. That of which we have a sensation at *some determinate time* is *real*.

3. That real existence which is conceived as belonging equally to *all time* is *necessary*.

And here I end this sketch, which probably has been too much protracted for the reader's patience, of Kant's system of Transcendental Logic; that is, of his exposition and justification of the *a priori* activities of mere Thought, and his determination of the precise limits within which alone this faculty can be legitimately exercised. Imperfect as my analysis of the theory is, it is probably enough to show, that whatever difficulties stand in the way of a full and distinct understanding of it, — difficulties which arise from his lumbering and obscure style, his barbarous and intricate terminology, his endless repetitions, and his meagre use of illustrative examples from familiar facts, — still the system can be made intelligible both as a whole, and in all its parts; and therefore, that Kant always perfectly understood himself, however incapable he was of making himself understood by others. This Transcendental Logic is the most obscure, but certainly the most original and characteristic, portion of the whole "Critique." I think, also, that

most persons will agree with me in regarding it as a marvel of ingenious and profound speculation, a storehouse of striking and important truths affecting the philosophy of mind and the logic of the sciences, and a triumphant refutation of the doctrines of materialism and sensualism. But it must be added on the other hand, that the system is needlessly intricate, operose, and abstruse, and, I had almost said, absurdly technical and systematic.

CHAPTER XIII.

KANT'S "CRITIQUE" *continued.* TRANSCENDENTAL DIALECTIC.

IT will be remembered that Kant's general problem, "how synthetical judgments *a priori* are possible," was divided into three particular problems; namely, (1.) how are pure Mathematics possible? — since this science is wholly synthetical and *a priori*. (2.) How is pure Physical science possible? — that is, how can we, independently of experience, establish any fundamental truths in physics? as we do, when we affirm that Substance is unchangeable or perdurable, and can never be increased or diminished; and that every physical phenomenon must be determinable both quantitatively and qualitatively. (3.) How are pure Metaphysics possible? — that is, how can we, independently of experience, know anything about *pure* or *real* being, as distinguished from *phenomenal* being, that is, again, about hyperphysical, supersensuous, or metaphysical objects?

The first of these problems, about pure Mathematics, was solved, it will be remembered, in the doctrine of Transcendental Æsthetic. The second, about pure Physics, has now been solved in the analytical part of Transcendental Logic, by showing that experience is impossible, until we have first constructed the objects of experience through applying the Categories to the manifold of intuition; and that this necessary application of the Categories, through the schemata of Time, gives us certain fundamental truths or rules, which are precisely what we wanted, namely, the fundamental *a priori* principles of all physical science. We are now to attempt the third problem, about pure Metaphysics, in the second part of the Transcendental Logic, namely, Transcendental Dialectic. And I may as well say beforehand, that the conclusion at which Kant here arrives is, that pure Metaphysics are impossible, that there is no such science as Ontology, or a doctrine of pure being, the whole which has hitherto received that name being only delusion, unfounded assumption, and error.

This remaining portion of the Critical Philosophy I must pass over hurriedly, though it contains many of Kant's peculiar and most

characteristic doctrines. Strictly speaking, we have thus far considered but one portion of the Logic of Thought, namely, the Transcendental Analytic; and we have yet to treat of what Kant calls Transcendental Dialectic, which is an exposure of the sophisms and fallacies into which the human mind inevitably falls when it endeavors, as pure Reason is constantly urging it to do, to push its researches up to unity and the unconditioned, by applying its principles and Categories hyperphysically, or beyond the bounds of experience. Kant makes a wide difference between the *transcendental*, or what goes *before* experience, and is presupposed by it as its necessary condition, and the *transcendent*, or that which lies wholly *beyond* the limits of experience. The latter, he maintains, is only a fruitful source of illusions and sophistry, urging us to constantly repeated, but hopeless, endeavors to reach the absolute and unconditioned. The bird, he says, feeling the resistance of the air to the motion of its wings, might fancy that it could fly better if this impediment were removed. But in a vacuum, it would drop helpless, and would thus find that the fancied obstacle really furnished the necessary support for its limited flight. It is quite characteristic of Kant to endow the human mind with a distinct faculty, the Reason properly so called, the highest and most far reaching of all its faculties, for the express and sole purpose of seeking the unattainable, of flying without air, of outstripping one's own shadow. As Hamilton remarks, Kant's "Reason" is only the Understanding which has overleaped itself; his "Idea," the product of Reason, is nothing but the Concept, the product of the Understanding, sublimated into the inconceivable.

But let us hear the master's own explication of his theory. Pure Logic is to be our guide in Transcendental Dialectic, as it was in the Analytic of the pure Understanding. It has already been explained, that the only proper function of pure or formal Logic is, to make an *analysis* of the work of the Understanding or thinking faculty, in order to ascertain what are the Forms and necessary Laws under which we always have thought, and not to point out new processes or methods of thinking, or any improvement of old ones, whereby we may more surely attain new truths, and thus either increase or fortify our knowledge. When thus limited in its endeavor, Logic is properly called mere "Analytic," and it expressly disclaims any intention to become an *organon* for the advancement, either of any particular science or of human knowledge in general. But in ancient and mediæval times, and especially by the sophists, the skeptics, and the Scholastics, Logic

was erroneously held to be an art, and not a science. They cultivated it with great diligence as the art of Dialectics, and declared that its special function was to promote science and aid in the confutation of error. The fallacies and sophistries into which they were thus led justly discredited their art as a profitless logomachy, or war of words; and the very name, Dialectics, became a term of reproach.

In like manner, argues Kant, the only office of Transcendental Logic is the Analytic of the pure Understanding, in order to discover its necessary and *a priori* Forms and Laws. But these are mere blanks and empty Forms, till they are filled up with the Matter of intuition, which can be derived only from experience. Every attempt to make a Transcendent use of them, by applying them in the region which lies beyond experience, as a means of attaining the Absolute and the Unconditioned, must be illusory and vain. Transcendental Dialectic is an exposure of the fallacies thus committed, a demonstration of the hopelessness of the endeavor to go beyond the bounds of sense, to realize pure Ideas, and thus to found a science of noumena or pure being.

Kant begins his discussion of the subject by remarking, that we have now travelled through the land of the pure Understanding, carefully surveyed and measured all its parts, and assigned to every thing therein contained its proper place. "But this land," he says, "is an island, surrounded by a wide and stormy ocean, the proper seat of illusion, where many a cloud-bank and rapidly melting ice-field deceives the mariner with a vain show of lands now first discovered, and, while thus feeding him with empty hopes, involves him in adventures which he can never abandon, and yet can never bring to a successful end. Before we embark upon this sea, in order to explore its entire length and breadth, so as to be sure whether there is any discovery there to be hoped for, it will be well first to glance at a map of the land which we are leaving, and to ask ourselves, whether we may not, after all, rest satisfied with what is contained in it, even if no other region should be discovered upon which we can build a home. We have seen, that every thing which the pure Understanding derives *a priori* from its own stores still exists solely in behoof, and for the use, of experience. The Categories, and the *a priori* principles of pure Physics which are founded upon them, contain, as it were, only the pure Schema of possible experience." Then, why seek to go farther? Why not be content with the knowledge of phenomena, of things as they appear? especially, since the judgments thus formed have at least

"empirical reality," or what Kant calls "objective validity," since they are necessarily true, not only for you and me, but for every human mind. As for noumena, or things as they really are, *per se*, why not let them alone?

Because, answers Kant, there is one thing which the Understanding that is occupied solely with phenomena cannot do; it cannot determine the limits of its own use, so as to distinguish clearly what is within its proper sphere, from that which lies outside of it and beyond its reach. He endeavors to establish these limits, through his doctrine, that an abstract conception does not increase our knowledge, if it be not *made sensuous*, that is, if it be not filled up, and made concrete, by the intuitions of sense; otherwise, he says, with a near approach to a pun, the concept is *without sense*, that is, without meaning. If a noumenon, he argues, is defined as that which is "not an object of sensuous perception," the definition is merely negative, and adds nothing to our knowledge. If it is defined positively, as "the object of a non-sensuous intuition," he declares that we have no such intuition. But herein he begs the question, by making it depend on the truth of his unfounded assumption, that consciousness is nothing but an internal sense. We assert, that the pure Ego of apperception, which is one and the same throughout all our mental acts, is an immediate intuition of consciousness, a faculty the testimony of which cannot be doubted, since the doubt, as Descartes proved, would annihilate itself; and Self, thus immediately apprehended *per se*, and not merely inferred from certain phenomena, is a veritable noumenon. We are conscious of the Thinker in one and the same act whereby we are conscious of the Thought; just as we cannot perceive motion without also perceiving the thing moved. *Cogito, scilicet sum.*

"All knowledge," says Kant, "begins with Sense, proceeds to Understanding, and ends with Reason," the last aiming to reach the highest unity of thought, which is the Unconditioned. The Understanding, as the faculty of rules and of immediate conclusions, *i. e.*, of inferring one Judgment directly from another, without the intervention of a third, or of uniting the Subject with a Predicate immediately, not employing a middle term; — the Understanding, I say, thus employed, can give us only a *relative* unity, a relative whole, a conditioned truth. The inferred judgment is true only *on condition* of the truth of that other judgment from which it was inferred; and this predecessor again has but a conditional validity, depending on the truth of that from which *it* was

derived; and so on, indefinitely. We seek an unconditioned judgment, not resting on any premise, and therefore true in itself, true absolutely. In like manner, the *whole* which the Understanding forms, by grasping together the manifold of intuition into an object, and individuals into a class, *is but a relative whole*, which is then placed under a genus, and this subsumed under successively higher genera, an absolute *summum genus* being thus the limit and aim of the process, but a limit which we can never reach. The *unity*, also, which is formed through the Categories out of the data furnished by experience, must be only *relative*, being conditioned by the union of its parts; for, as it exists in Space and Time, each of which is divisible without end, the indivisible can exist only in conception, never in reality.

"By Idea," says Kant, "I understand a necessary conception of the Reason, for which no corresponding object is presented by the Sense. Accordingly, the pure conceptions of Reason, which we are now considering, are Transcendental Ideas. They are conceptions of pure Reason, for they regard all empirical knowledge as determined by an absolute totality of its conditions," or as traced back through the whole series of its conditions, till we reach its absolute cause, or absolute unit, or absolute whole. The conception of an *atom*, for instance, requires us to carry back the division and subdivision to infinity, in order to reach the absolute unit which cannot be divided; and the existence of this ultimate unit is said to be the necessary prerequisite or condition of the whole series, since, otherwise, there would be an aggregate or multiple not consisting of units, which is a contradiction. These Transcendental Ideas, continues Kant, "are not mere fictions arbitrarily thought out, but are presented by the nature of Reason itself, and therefore necessarily relate to the whole ground for the use of the Understanding. Finally, they are also *transcendent*, and go beyond the limits of all experience, in which, consequently, an object can never be found which is an adequate presentation of a Transcendental Idea." "Hence," he adds, "we cannot affirm of Wisdom in a disparaging way, that *it is only an Idea*."

Kant proceeds to justify this use of the word Idea by the authority of the great philosopher of ancient times. Plato, he says, shows that he meant by it, "not only something which is never derived from the Sense, but which goes far beyond the conceptions of the Understanding, to which Aristotle restricted himself. Nothing which is accordant with it can be found in experience. Ideas are, for Plato, the primitive images or archetypes of things

themselves, and not mere keys to possible experience, like the Categories. In his opinion, they proceed from the highest Reason, by which they are imparted to human thought, though now no longer found there in their original state, but are sadly obscured, so that they can only be recalled with effort through reminiscence, which is Philosophy." "Plato found his Ideas especially in all that concerns Morality, as this depends upon the Freedom of the Will, and this, again, upon cognitions which are a peculiar product of the Reason. He who would derive from experience the conception of virtue, who would make (as many have really done) what can serve, at best, only as an imperfect illustrative example, to be the pattern of our Idea of what is moral, would convert virtue into a nonentity, or an ambiguous thing, not subject to rule, and changeable according to time and circumstance. That a man can never make his conduct conform perfectly to the pure Idea of virtue, does not prove this Idea to be something merely chimerical. For as regards nature, experience gives us rules, and is the source of truth; but in regard to the moral law, experience, alas! is the mother of illusion, and it is extremely reprehensible to derive the laws about what I *ought to do* from what *is done*, or even to limit them by this consideration." It is on the authority, then, of the great Athenian philosopher, that Kant establishes his distinction between the merely *regulative* use of the Ideas of pure Reason, and the *constitutive* employment of them in dogmatical affirmations about what lies beyond the bounds of experience. Ideas are presented to us as ends which are to be striven after, but not as objects of possible accomplishment.

All this is plain enough. But Kant is not satisfied till he can show how the Transcendental Ideas of the Reason, which are only the Infinite and the Absolute regarded as forms of the Unconditioned, are derived from just such analysis of the forms of logic as produced the Categories. As Reason is the faculty of principles, aiming always at the highest principle, its function is that of mediate conclusion, or *reasoning*, the only form of which is Syllogism, whereby, through the intervention of a third or middle term, we reduce the two premises to a single conclusion. This is a unifying process, perfectly similar to that whereby Judgment unites its two terms, the Subject and the Predicate, into a single Concept. As the Forms of Judgment produced the Categories, so we may expect the Forms of Syllogism will originate those pure conceptions of Reason, which are called Transcendental Ideas. There are but three of these latter Forms, all comprised under the head of Rela-

tion; they are the Categorical, the Hypothetical, and the Disjunctive Syllogism. Carrying on each of these through prosyllogisms, or antecedent reasoning, the validity of each stage in the process being conditioned on the validity of the one next above it in the scale, we thus approximate: First, the unconditioned of the Categorical synthesis in a subject, *i. e.*, an unconditioned Subject, which cannot become a Predicate. This is Self, the indivisible Ego of consciousness, which can be Subject to any Predicate, but can never be Predicate to any Subject. In other words, it is thought as absolute substance, or being *per se*, not *per aliud*. Secondly, the Unconditioned of the Hypothetical synthesis in a series, or a Cause which cannot become an Effect; *i. e.*, a hypothesis than which there is none higher and broader, and which therefore includes the World, or universe of phenomena. Thirdly, the Unconditioned of the Disjunctive synthesis of parts in a system, or a Whole which cannot become a Part; *i. e.*, an aggregate of all the members in a complete division, which must embrace not only all actual, but all possible, existence, and is therefore *ens realissimum*, the aggregate of all existence, God. These, then, are the three Forms of the Unconditioned, the three Transcendental Ideas of Pure Reason: 1, the absolute unity of the thinking Subject, or the human soul, the indivisible Ego of Consciousness; 2, the absolute totality of phenomenal existence, or the Universe; 3, the foundation and reality of all actual and possible existence, God. Hence the three sciences, which Pure Reason strives, though vainly, to establish, — rational Psychology, rational Cosmology, and rational Theology. According to Kant, only an empirical science can be established under either of these heads; for in each case, that which assumes to be based on *a priori* principles is mere illusion and sophistry.

We may give another, and perhaps more intelligible, account of this genesis of the three Transcendental Ideas. Since all Conditioned existence, as its very name implies, depends ultimately on the Unconditioned, whenever Conditioned existence is given, inference is permissible from it towards the Unconditioned as an end or aim, which is never to be reached, but always to be striven after. In proportion as we strive after it, our knowledge is carried up higher towards unity. Now, Conditioned existence, *i. e.*, existence depending on something else foreign to itself, is given in three different ways: 1, as an internal phenomenon, something *in us;* 2, as an external phenomenon, something *out of us;* and 3, as possible existence in general, whether real or conceived. Then we must reason in a threefold manner: First, up to the Unconditioned *in us*,

the Subjective Unconditioned, which lies at the ground of all internal phenomena, *i. e.*, the Soul, the Ego; secondly, up to the Unconditioned *out of us*, the Objective Unconditioned, or complete Object, Nature as a whole, or the World-Universe. It is obvious that the World in its largest sense, or the Universe, must be Unconditioned, since it comprises every thing *in* itself, and therefore can have no condition *out of* or beyond itself. And thirdly, to the Unconditioned in respect to all possible existence, the absolutely Unconditioned, the sum of all possible realities, God himself.

The genesis of these three Transcendental Ideas from the three fundamental Forms of Syllogism is easily given. First, the Unconditioned Ego is thus derived from the Categorical Syllogism, of which this is the Form: —

All M are B;
But A is M;
Then A is B.

The Major Premise, as will be remembered, is the origin of the Category of Substance and Attribute. Here, the Conclusion, A is B, is not true unconditionally, but only on condition of the truth of the Major Premise, that "all M are B;" and M is not an unconditioned Subject, *i. e.*, a Substance, for in the Minor Premise, "A is M," M appears as a Predicate, *i. e.*, as a mere Mark or Attribute. Then let us try to prove that "All M are B" by a prosyllogism, taking a still broader Concept, N, as the middle term.

All N are B;
But M is N;
Then M is B.

Here the same difficulty recurs. The conclusion is true only *on condition* of the truth of the Major Premise, in which N, though a broader Concept than its predecessor, M, is still not an unconditioned Subject or Substance, since it appears in the Minor Premise as mere Predicate.

And were we to continue this process indefinitely, always striving to prove the Conclusion by a prosyllogism, that is, by employing a higher and broader Middle Term, we could never reach the Subjective Unconditioned, the Ego or Self, the only Subject which cannot become a Predicate. Hence, the Subjective Unconditioned appears as a limit or aim, which we are always striving after, but never can obtain or reach. The Idea of it is merely regulative, not constitutive.

2. The Objective Unconditioned, or World-Universe, is thus derived from the Hypothetical Syllogism, the Major Premise of which,

as will be remembered, is the origin of the Category of Cause and Effect. This is the Form: —

If A is B, C is D;
But A is B;
Then C is D.

Here, avowedly, the Conclusion is true only *on the condition* expressed in the Major Premise, if A is B. And even this is not the Unconditioned Cause of C being D, for we have as yet no proof of the Minor Premise, that A is B. Let us try to prove it, then, by a prosyllogism, thus referring the immediate antecedent to a higher Cause.

If M is N, A is B;
But M is N;
Then A is B.

Here we have the same difficulty. The Conclusion is not Unconditioned or Ultimate Cause, but is conditioned on our proving M to be N, which requires a prosyllogism, and so on forever. We trace one conjunction of events to another, till we have exhausted all the phenomena of the physical universe; still we do not, and cannot, find an Unconditioned Cause, *i. e.*, one which is not itself an effect of a preceding Cause. Then the absolute totality of events, constituting the whole history of the universe, is unattainable.

3. The Unconditioned in respect to all possible existence, that is, the absolutely Unconditioned, is derived from the Disjunctive Syllogism, which, in its Major Premise, expresses the Category of Reciprocity of Action. This is the Form: —

A is either B or C; But A is not B; Then A is C.

Here, the conclusion is valid only on condition that the B or C of the Major Premise is a complete Disjunction; for if there were an unexpressed term, suppose D, then it would not follow, though A were not B, that it must be C. It might be neither; it might be precisely the term which was not expressed. And this difficulty would still exist, however many terms we might add; for how can we exhaust in language the terms not only of all real, but of all possible existence? To indicate the existence of an infinite and absolute God, beyond whose perfections nothing is conceivable, we must express an infinity of Worlds, each one of them being infinite.

And here we end this curious parallelism of Logic and Metaphysics, which is at once the most forbidding, the most difficult to

be understood, and the most characteristic feature of the Critical Philosophy. All that remains, to complete Kant's work, is to examine the reasons which have actually been alleged to prove, (1.) the personality of the thinking Subject; (2.) the nature of the universe as a whole, whether it be limited or unlimited, caused or uncaused, substantial or phenomenal; and (3.) the existence of a God; and to show that they are as baseless as, according to this *a priori* deduction, they ought to be. We shall thus complete the demonstration of the impossibility of ontological Metaphysics.

First, we have the idea of a being, our own Ego or Self, which is the principle of all our actions, and the subject of all our knowledge, and to which, therefore, we attribute an existence out of and beyond our present sensuous existence, and conceive it as an absolutely simple, unchangeable, and immortal Substance. But this, Kant maintains, is an illusion, founded on a paralogism or involuntary sophism, which converts a logical necessity of Thought into a real and independent Substance not perceptible by sense. Granted, that thought is impossible except under the Form, *cogito*, "I think." Still, this is a mere conception, a blank Form of Thought, not intuited or perceived, and therefore having no Predicate or Mark whereby to distinguish it from any other existence. What am I? I cannot cognize the Ego as an Object of Thought, that is, as a concrete existence, but only as a necessary Subject of Thought, or means of cognizing anything else. The Ego, being presupposed for any cognition whatsoever, would need another Ego in order to cognize itself; therefore, like the corporeal organ of vision, or bodily eye, as our only means of seeing anything, it cannot see itself. Take the Judgment, "I think myself;" *Ego me cogito.* Here, there are two things concerned: (1.) the "Ego," which is only a logical or judging Subject, the *thinking* Ego, without which this judgment, or any other judgment, would not be possible, and which is therefore a mere blank conception of the mind; and, (2.) the "me" which *is thought of*, or the real *object*, about which we endeavor to think. If this "me" were a real existence, which it purports to be, it would be presented to us through some intuition of the external or internal sense; since thus alone can any actual existence be perceived. But it is not so presented and intuited; and therefore it is a mere nonentity, a fiction of thought. The subjective condition of thought cannot be the positive cognition of an object. In short, Kant's argument against the substantial existence, or absolute character, of the "Ego" or Self, is a perfect parallel to his argument against the objective validity of

Space and Time. Because an *a priori* intuition of Space is a necessary condition or prerequisite, without which I could not perceive any external object to be external, or any body to be body, therefore Space itself is only a subjective or mental intuition. Because it is necessary, it must be subjective or unreal; for necessity cannot be made known by experience, which, at the utmost, reaches only the customary or habitual. In like manner, because the "Ego" is a necessary prerequisite for thinking anything, it cannot be presented to me by experience, as an object which is thought; for then there would be nothing to think it, and it would also be contingent, instead of necessary. We cannot erect our subjective necessities into objective affirmations. We cannot hypostatize or incarnate blank conceptions.

I presume any one, to whom this skeptical argument against his own existence was first presented, would put it down as a mere logical puzzle, though he might not be able to point out the source of the fallacy in it. In fact, Kant does not seem by this reasoning fully to have convinced himself; as if with an uneasy feeling, he recurs to the subject again and again, repeats himself even to weariness, and presents quite a different version of his argument in the later publication of the "Critique" from that which was given in the first edition. The mistake here, as I have already pointed out, arises from what is, in truth, a fundamental error in his system, that of degrading Consciousness into what he calls the internal sense, thereby placing it entirely on a level with the external senses, and thus in great part breaking down the distinction between immediate and mediate knowledge. Certainly, we know external objects only *through* the impressions which they make upon our senses; and this, at best, is only mediate knowledge. In like manner, the *substance* of things external is only cognized or thought, — *necessarily* thought, indeed, — but not directly perceived, as that in which their attributes or qualities inhere; this, at best, being but an inference. But the data of Consciousness are known, not *through* anything else, but *in themselves*, or immediately; and any doubt of this, their immediate, presentation would be suicidal; since this doubt would equally affect their presentation as necessary, and as internal or subjective, and thereby would invalidate Kant's own argument. The distinction between necessary and contingent, between objective and subjective, even between Intuition and Thought, rests upon the same testimony of Consciousness, which affirms the difference between that which is, and that which is not, present to my mental vision, — between the Ego and the Non-Ego, — between

active and passive states of mind. All these distinctions must be accepted or rejected together, since they are not the results of argument, but the bases on which argument is founded, or from which it proceeds. They are immediate data of Consciousness, which even skepticism must respect, if it be philosophical or reasoning skepticism, and not mere baseless and arbitrary affirmation or denial. I cannot recognize Thought to be Thought, and not Volition, if I do not recognize each as *my* Thought and *my* Volition. Now what is either Thought or Volition? It is an *action*, — something that I do or perform; and its relation to the Ego, or Myself, is, not an inferred relation from an Attribute to an unknown Substance, but a relation immediately perceived between an action and an agent. An act cannot be perceived without perceiving the agent, any more than I can perceive motion without perceiving the thing moved. Granted, that the Ego or Self is not a conception, for it has no Marks or Attributes, and therefore no complexity of parts to be grasped together. This is only saying that it is a direct and simple intuition, like that of the color *red*. It can be cognized, or thought, though not by plurality, yet by difference; for as we perceive red to be red, by distinguishing it from blue or yellow, so we perceive the Ego to be the Ego by distinguishing it from the non-Ego. In the Judgment, "I think myself," granted that the Ego, as thinking, is necessarily the Subject, and not the Object, *of Thought;* still it is an Object *of Consciousness;* else the affirmation itself, as a whole, would not be possible. And the Judgment itself, "Ego me cogito," is an affirmation of Consciousness; *what* it affirms is, that the "Ego" as thinking, and the "Me" as thought, are not *two*, but *one*, — the indivisible Ego of Consciousness. As I have already remarked, we could not know Time itself to be in a perpetual and uniform lapse, forever gliding onward with an equable motion, if we did not refer it to the only fixed point of Consciousness, the unchanging Ego. We could not perceive that the river was flowing past us, if we ourselves were not immovable. Kant himself says, that "I am conscious of myself is a thought which contains a double Ego, namely, the Ego as Subject, and the 'me' as Object." But he admits, that "thereby a double personality is not meant, but only that the Ego who thinks and intuits is *the person*, while the 'me' of the Object, like other objects outside of me, is *the thing*." And he makes this further admission: "How it comes about that I who think should be an object of intuition to myself, and thereby that I should be able to distinguish myself from myself, is something which is absolutely incapable of explanation, although it is

an incontestable fact. And it shows that the mind has a power, which is so superior to all the perceptions of mere Sense, that it is the groundwork of a *human* Understanding, and so effects a complete separation of man from any species of the brutes, since we have no reason to attribute to any one of them a capacity of saying 'I' to itself." Hence it has been wittily remarked, that if we could only suppose a pig saying to itself "I am a pig," it would, *ipso facto*, cease to be a pig.

The second Form of the Unconditioned, or Transcendental Idea, is the Object *out of us*, conceived as an absolute totality, or all, and therefore as having nothing beyond itself by which it could be limited or conditioned. This is the World-Universe, conceived both as an aggregate of *coexisting* parts occupying all Space, and as a series of *successive* events, or stages of existence, extending through all Time. The Idea of it as Unconditioned can be found only in the absolute totality of this series or aggregate. But when we attempt to form in thought a representation of this totality, we find ourselves involved in what Kant calls the Antinomy of Pure Reason, or Conflict of Transcendental Ideas, whereby the doctrine which we seek to establish, denominated the Thesis, and its opposite or contradictory doctrine, denominated the Antithesis, are both found to rest on demonstrative or incontrovertible arguments, leaving us utterly at a loss which to choose between them. Thus, we seek to prove, first, the Thesis, namely, that the world had a beginning in Time, and is also limited in regard to Space; and we succeed in doing so to our entire satisfaction. But then we are dismayed to find, that the Antithesis, or contradictory doctrine, that the world had no beginning in Time, and has no limits in Space, but is infinite in regard both to Time and Space, may also be perfectly made out by equally satisfactory arguments. Such a conflict, such a hopeless dilemma, is the inevitable result of seeking to push our knowledge beyond the limitations imposed by the very nature of the human mind, — that is, beyond the bounds of experience by actual perception.

I will give a specimen of this fencing with contradictory arguments. The Thesis, that the World had a beginning in Time, is thus proved: If it had not a beginning, then, up to any given moment or date, an infinity of its successive states of existence must have already elapsed. But the very nature of an infinite series is, that it never *can* have elapsed, since the Infinite has no end. Then the World had a beginning. Q. E. D. But now take the Antithesis, that it had no beginning, and we prove it thus: As

a beginning is an existence preceded by a time in which the thing did not exist, before the beginning of the world, there must have been an empty or void Time. But in a void Time, the origination of anything is impossible, inasmuch as there is nothing in it to determine whether the world should begin, or not. Then the World did not begin. Q. E. D.

The second portion of this Thesis respecting Cosmological quantity, that the world is not infinite in extension, but has definite limits or boundaries in space, is thus demonstrated: "If we assume the contradictory of the proposition to be true, then the world is an infinite given whole, or aggregate, of coexisting things. But the magnitude of a quantum, which is not given within certain limits of an intuition, cannot be thought in any other way than through the synthesis of its parts; and the whole of such a quantum must be such a synthesis *completed* by the repeated addition of unity to itself. Accordingly, in order to think as a whole the world which fills all space, we must consider the successive synthesis of the parts of an infinite whole as finished; that is, an infinite time must have elapsed in the enumeration of all coexisting things. But this is impossible. Then an infinite aggregate of real things cannot be considered as a given whole, or as existing simultaneously." Hence, as its contradictory is false, the Thesis must be true, that the world is *not* infinite in extension, but has definite limits in space.

But in a perfectly similar fashion, the Antithesis may be also demonstrated. For here, too, let us assume the truth of the contradictory, namely, that the world is finite and limited in extension; then it exists in an empty space, which is not limited. Then there would be, not only a relation of things to each other *in space*, but also a relation of the things *to space* itself. But this relation to a void space would be a relation to *no object;* that is, it is no relation at all. Therefore, the world is not limited in space, but is infinite in extension.

Thus far, I have given only the First Antinomy respecting the World-Universe; that which concerns its Quantity. But there are three other such Antinomies about it, corresponding to the three other Tables of the Categories, those of Quality, Relation, and Modality. It would only be fatiguing to go through them all, the reasoning is so similar. But I will give one more specimen, in the Third Antinomy. The Thesis is this: Causality according to physical law will not, *alone*, account for the *origin* of the universe; but there must be, united with it, a spontaneous or free-will

causality. For, according to physical law, every event or stage of existence is the necessary consequence of some preceding event; and this event, again, necessarily results from *its* predecessor; and that, again, from a third; and so on forever. Then the series of physical causes is infinite, and, of course, there was no *original* event, since every event had a predecessor. Then, physical causation alone does not account for the beginning of things, but the whole series of physical events must be regarded as one free or unconditioned cause. In other words, there must have been some cause not physical, not necessitated by a predecessor; that is, a free-will cause. Q. E. D. But now hear the proof of the Antithesis, that a free-will, or spontaneously self-originating, cause is impossible. Every acting cause, *before* it acted, must have been in a state of inaction. And before the origin of the universe, *i. e.*, before anything existed, there was nothing to determine such a cause to act, rather than to remain in inaction. [But as by hypothesis it is spontaneous and free, it needs not to be determined to act; it determines itself.] Then a free-will cause will not account for the origin of the universe. Q. E. D.

The point of the argument in the Thesis here is humorously illustrated by Coleridge. "A chain without a staple from which all the links derive their stability, or a series of Causes without a First, has been not inaptly allegorized as a string of blind men, each holding the skirt of the man before him, reaching far out of sight, but all moving without the least deviation in one straight line. It would be naturally taken for granted, that there was a *seeing* guide at the head of the file; but what if it were answered, 'No, Sir; the men are without number, and *infinite blindness* supplies the place of sight.'"

This reasoning may be stated in still another form, in which, perhaps, its cogency will be more apparent to the ordinary reader. If I wish to move an object which is not immediately within my reach, and therefore I push it with a stick, it is still true that I, and not the stick, am the Cause of its motion. Even if another intermediate means be employed, if, with a stick, I push a board on the farther end of which the object is lying, still I am the only Cause of that object's motion, the stick and the board being merely my implements. And the same may be said, though the means employed be ever so numerous; they are only means or implements, while I am the First and the sole Cause of the motion. Now, what are called Physical Causes, or Second Causes, are only such physical means and implements; however long a chain of them be em-

ployed, they are mere sticks, boards, or stones. Not one of them has any self-originating power; it acts only so far as it is acted upon. Wholly incapable even of changing its own state, it certainly cannot change the state of anything else. When the question is asked, what is the Cause of this phenomenon, of this change of state, which is now taking place before our eyes, we make no progress whatever toward answering it, by pointing out some other physical phenomenon as its invariable antecedent. Such an antecedent has not even the power which belongs to every one of Coleridge's blind men; it cannot, *of its own accord*, either move or push. Consequently, we need a First Cause, *i. e.*, one acting spontaneously and with free-will, not merely at the head of a file which extends backward indefinitely, but whenever and wherever motion or change is produced. Professor Tyndall's "Matter," in which he discerns "the promise and the potency of every form of life," is a mere stick in the hands of an agent. Not the brickbat, but he who threw the brickbat, caused the man's death.

The futility of the questions which are considered in the Antinomies is pointed out by Kant in still another manner. He says, we should be more willing to let such questions alone, if we could see beforehand that the answers to them, whichever way they might turn, would only augment the obscurity of the subject, and rescue the mind from one perplexity by involving it in another. This is actually the case with all those attempts to form a conception of the Kosmos as an infinite whole, which inevitably involve the mind in Antinomies. We may be sure beforehand that, whichever side of the question respecting the Unconditioned is favored by the endeavor to synthesize the whole series of the Conditioned, the result will be either *too small*, or *too great*, to be intelligently grasped by the Understanding.

First, if the world had no beginning, it is *too great* for our conception; for an attempt to trace the series backward can never overtake the whole eternity which has elapsed. And if we suppose it did have a beginning, then it is *too small* for our thought; since, as a beginning presupposes a time which antedated it, it cannot be unconditioned, and we must look higher for a time-condition on which it depends. In like manner, if the world is infinite and unlimited in Space, it is *too great* for any possible conception which begins with experience. Is it finite and limited? Then you have a right to ask what determines those limits. Since no one can have an experience of what is absolutely void, empty space cannot be a correlative of things, or a condition which forms a

part of possible experience. Accordingly, a limited world is *too small* for our conception.

For another instance, take the case of the fourth Antinomy. If you assume an absolutely necessary existence, — whether it be the world, or something in the world, or the Cause of the world, — then you must assign to it a time which is infinitely remote from any given moment of time. Then such an existence is inaccessible, because it is *too great* for our finite thought. But if your opinion is, that every thing which belongs to the world is contingent, then every given existence is *too small* for our conception; for to be contingent is to depend on some other existence lying behind it.

In all these cases, we have said that the cosmological Idea is either too great, or too small, for any intelligent conception by the Understanding. But why should we not say just the reverse, and throw the blame on the Understanding rather than the Reason, by affirming the Conception to be too small, or too large, for the Idea? Because, answers Kant, it is only experience which can give reality to our concepts, and therefore a possible empirical conception must be the standard, whereby we judge whether an Idea is a mere *ens rationis*, a fiction of thought, or whether it relates to an object in the world. If we say a thing is too large or too small for another thing, the former is regarded as existing for the sake of the latter, and therefore needing to be adapted to it. One of the trivial questions in the old schools of dialectics was this: If a ball cannot pass through a hole, shall we say that the ball is too large, or the hole too small? In this case, it matters not which expression we employ, for we do not know which exists for the sake of the other. On the other hand, we certainly should not say, the man is too long for his trousers, but the trousers are too short for the man.

Most of these Antinomies are perfectly well founded, and they are stated by Kant with great force and clearness. They are simply the inextricable difficulties in which the human mind, *as finite*, finds itself involved whenever it seeks to grasp the idea of the Infinite, or endeavors to reason either from, or up to, the Infinite. But Kant does only half his work. He constructs the labyrinth, and shows the impossibility of finding our way out of it. But he does not show, what is obvious after a little reflection, that there is no necessity of putting ourselves into the labyrinth at all; that we may pass it by on the other side with impunity and indifference, as an insoluble problem with which we have nothing to do. When we keep within the proper range of our faculties, we know all that it concerns us to know, without troubling ourselves with what lies

beyond. To say that man cannot grasp the Infinite, is simply to say, that Man is not God. To escape the whole puzzle, we need only remember that Philosophy of the Conditioned, which has been already reviewed, as first taught by Pascal, and repeated after him by Sir William Hamilton and Mr. Mansel. Nothing can be more true than this, for it is the highest law of human thought, that of two contradictory propositions, one *must be* true. Either Space has a limit, or it is unlimited. Time is either finite, or it is infinite. Either the world did begin to be, or it has existed forever. No person in his senses, whether a German Transcendentalist or a Positivist of our own day, would deny that one of each of these alternatives is incontrovertibly certain. Then, what is the consequence of proving, as we can very well do, that *both* branches of each alternative are alike inconceivable, — that is, cannot be grasped in human thought? Simply this: that the limits of our thought are not the boundaries of existence; that the inconceivable is not therefore the impossible; and that we logically may — nay, that we *must* — accept some truths that we cannot fathom. Faith rightly comes to supplement knowledge, when knowledge herself confesses that her own resources are exhausted, and that such aid is indispensable.

The third Form of the Unconditioned is that of the sum of all realities and of all possibilities, the absolutely perfect, the source of all existence, and therefore Himself necessarily existent; — in one word, God. This Form of the Unconditioned is not an Idea in the abstract, but an Idea in concrete, or an individual Being, — therefore denominated by Kant an Ideal. Thus, virtue, in the abstract, is an Idea; but the perfectly virtuous man, such as is presented in the conception of the Stoics for imitation, is an Ideal.

As the Idea provides a rule, so the Ideal serves as an archetype for the perfect determination of the copy or ectype. Thus, the conduct of this supposed perfectly virtuous man serves us as a standard of action, with which we may compare and judge ourselves, and so it may help us to reform ourselves, although we can never obtain the perfection which it demands. "Be ye therefore perfect, even as your Father which is in heaven is perfect." Here, the Unconditioned, because complete or perfect, must comprise all possible predicates or attributes, except negative ones, and is therefore entirely determinate; as such, he must be an individual Being, since every abstract conception or Idea is formed by abstraction, that is, by throwing out some predicates. As the condition of all existence, he is the source and sum of all realities, *ens*

realissimum; since he could not impart that which he did not himself possess. In like manner, as the source or cause of all the attributes of his creatures, he must possess all those attributes, excluding, of course, those which are mutually contradictory, and those which are merely negative, as these are conditioned by their positives; and he is Unconditioned. As Unconditioned, also, his existence does not depend upon anything else, but he is self-existent, or uncaused, an absolutely necessary Being. To speak summarily, God must be *thought* as an Ideal, the most real of all beings, and as necessarily existent.

Since only conditioned existence is immediately known to us by direct perception, how can we prove the necessary existence of this Ideal as Unconditioned? Three ways are open for such proof. The first is the Cartesian or ontological argument: — that this Ideal, as perfect, includes all possible attributes; but existence is an attribute; then the existence of God is contained in, and proved by, that Idea of God which we unquestionably possess. Kant's answer is prompt and fatal; existence is not an attribute, and therefore is not included in the Idea. An attribute is that, by adding which, the sphere or intension of a term is increased; and by taking away which, the sphere is diminished. Now, to affirm existence is simply to put the Copula into a Judgment, not to add another predicate to its subject, and thereby enlarge its sphere. When I have said, "a triangle is a three-sided figure," my idea or conception of it is not at all enlarged by adding "the triangle *is*," or exists; and conversely, by denying its existence, by saying "the triangle is *not*," I do not at all impair or diminish my conception of a triangle. My conception of Romulus, or George Washington, remains just the same whether I believe that such a man ever really lived, or not. Kant's reasoning, then, is perfectly sound, though it is needlessly abstruse and technical in form. It may be more simply and forcibly stated thus: The idea of necessary existence certainly forms a part of our complex idea of God. But the reality of it does not follow from its idea, any more than the reality of a winged horse follows from my conception of Pegasus. In fact, as real existence is the very opposite of ideal existence, it is a contradiction in terms to affirm that the former, "the real," is contained in the latter, "the ideal."

The ontological argument must be abandoned, then, as having no weight whatever; and Kant is equally peremptory in his attempt to sweep away the cosmological proof also. According to this argument, in order to explain finite and relative things, we must sup-

pose an infinite and absolute being. There must be a ground of being out of and beyond the relative and the finite, for as their nature and their very name import, they have no ground of being in themselves. The Conditioned, according to the very meaning of the word, depends on the Unconditioned. Now, all the objects and events of which we have experience are limited, contingent, and dependent; in one word, they are conditioned. They depend on antecedent events, and these again on their predecessors. They are fleeting; they rise and pass away. One generation succeeds another; all are subject to change, decay, and death. There must be somewhere a cause or reason of these fleeting and dependent phenomena, some first principle, independent and necessarily existing, the source of all finite being; and this necessary existence can be only the highest and most real of all, God himself. This is the cosmological argument; essentially it is reasoning from effect to cause, from secondary causes, if there are any such, up to the First Cause, the origin of all things. Kant finds fault with it at every step, as inconclusive and resting on baseless assumptions. The inference, he says, is from the contingent and dependent existences, which we know through experience, up to a necessary and unconditioned existence, which we do not know, which lies wholly beyond experience, and is conceived only as an Idea, a mere figment of human reason. There must be a necessary and independent being, it is argued, because an infinite series of contingent beings is impossible. Who told us it was impossible? How can such impossibility be proved? In fact, we have no assurance that the series needs to be infinite. We take this infinity for granted, then assert it to be impossible, and are thus guilty of two unfounded assumptions in one breath. Suppose the chain of causes is finite, that it stops at a certain point; still we have no right to interpolate at this last link a new sort of existence, one lying entirely out of the series, an unconditioned and necessary being. Even if the reasoning were faultless, still it would give us only a necessary First Cause, which might be blind and purposeless, a fate or necessity, and therefore not a sum of all reality and perfection, — not a God.

Finally, we come to what is usually called the argument from design, though it is denominated by Kant the physico-theological proof. Instead of arguing from the mere existence of the world, as in the cosmological proof, the reasoning here is based upon the grandeur and excellence of the world, on the perfection which is presented in the arrangements of the universe, and in the manner

in which its parts are put together, and the succession of events in it is regulated. "The world around us displays so grand a spectacle of order, variety, beauty, and conformity of means to ends, whether we follow it into the infinity of space on the one hand, or into the unlimited subdivisions of it on the other, that we find, even in respect to the imperfect knowledge of it which our weak minds can reach, that, in the presence of wonders so numerous and so inconceivably great, language has lost its force, and number its power to reckon; nay, even thought fails adequately to conceive; so that our judgment of the whole resolves itself into an astonishment which is all the more eloquent, because it is speechless. Everywhere we behold a chain of causes and effects, of means and ends, of conformity to law in beginning to be and ceasing to be; and as nothing has entered of its own accord into the condition in which it is found, we are continually referred to some other thing as its cause, and this again suggests the same question respecting the origin of its being. Hence, the universe must sink into the abyss of nothingness, or we must assume something lying outside of this infinite chain of what is contingent, something primal and self-subsistent, which is the cause at once of its origin and its continuance." Reason compels us to admit that there must be an author of all these wonders, and to attribute to him all possible perfection. Kant speaks of this argument with great respect; it is, he says, "the oldest and the clearest of all, and that which is most conformed to the common reason of mankind." It animates the study of nature, and the knowledge of nature again reacts upon this idea as its cause, till "our belief in a divine author of the universe rises to an irresistible conviction."

Still, he affirms, we must abate the pride of human reason by showing, that this argument "can make no claim to demonstrative certainty, and to an approbation founded only upon its own merits." As it is limited to the arrangements of the universe, and to the manner in which its parts are put together, taking for granted the raw material out of which these wonders are fashioned, it proves, at most, only the existence of a world-architect, but not of one who created it from nothing. Besides, it establishes only the existence of a cause proportionate to the extent and excellence of the arrangements which we behold; very great and astonishing as these are, even immeasurable by the human intellect, they do not authorize us to conclude that the author of them is *infinite*, or even to ascribe to him all possible perfection. Even from such unity of plan, such harmony in the coöperation of separate parts, as we per-

ceive, we cannot justly infer the *absolute* unity of Him who made them. This argument, then, persuasive as it is, is far from possessing all the requisites of scientific proof. It is not apodeictic.

Well, suppose it is not. This is only saying that we cannot demonstrate the existence of a God, in the same manner in which we demonstrate a theorem in geometry. From its very nature, a matter of fact is not susceptible of mathematical proof. It can be established only on the same grounds on which we rest our assurance of any actual occurrence in the past or the present, or of the reality of any person whom we have never seen. The great doctrine of the being of a God is not a question about the relations of abstract ideas, and therefore does not admit of what Kant calls apodeictic certainty. It is rather a question of experience. It rests on the same sort of basis as our belief, that man is mortal; that we must all die; that we were born not many years ago, and passed through the stage of infancy, though we have not now the slightest recollection of that helpless period of our lives. We never visited Moscow; but we have not the slightest doubt that such a city exists. We never saw Dr. Franklin, and probably never knew a person who had seen him; but we are fully convinced that he once lived and wrote. Who believes that his assurance respecting any of these facts would be enlarged or strengthened, if it could be changed to *demonstrative* certainty? I think the world owes a debt of gratitude to Kant for proving beyond all question, that the being of a God cannot be demonstrated after the methods of the geometer and the metaphysician, and for thus removing it wholly out of the region of metaphysical abstractions.

In like manner, the merely metaphysical conception of the nature and attributes of God may be abandoned with great advantage to the interests of religious belief. The metaphysical idea of infinity is an inconceivable abstraction. We cannot prove its existence in concrete, as realized in a personal and conscious God, simply because we know not what it is; and whenever we attempt to grasp it, to reason from it or up to it, we are involved in inextricable contradictions. The infinite is that which cannot be increased; but every thing which we know is capable of increase. The infinite has no parts; but every thing which we know consists of parts. The infinite admits of nothing beside itself, for it embraces all; then we ourselves are swallowed up in it, and are lost in this pitiless abstraction. The only faith to which it leads, if faith it can be called, is pantheism; and pantheism is but logic run mad, and reason driven by despair to suicide; for it is self-annihilation. To the finite mind,

the infinite is a negative idea, the negation of all that is conceivable. When we are told merely what a thing is not, we are not thereby enabled to know what it is; and what is the infinite to us except the not-finite, that is, not anything of which we ever had, or can have, experience? The mathematicians, after puzzling themselves in vain about this negative conception for more than two centuries, have at last extricated themselves from the labyrinth by resolving the infinite into the mere indefinite; the infinitely large and the infinitely small, as they now confess, never meant anything in their language except quantities which might be made as large or as small as we please, without affecting the other conditions of the question; that is, simply the indefinitely large and the indefinitely small. A similar reform needs to be made in all the philosophical sciences, including theology. *As known to us*, the infinite is not, what the etymology of the word imports, that which *has no limits*, but that to which *we know of no limits*, — that which is at least coextensive with the universe, or with all that we do know; how much greater than the universe, we cannot tell, but we may know hereafter. Is this an anthropomorphic conception of the Deity? It is so in no other sense than as it declares, that every object of thought can be presented to us only as modified by the laws and conditions of that faculty through which we think it; just as the pure and white light of the sun must come to us through the earth's atmosphere, and be thereby modified and partly shorn of its lustre, before it can reach our eyes, though even then it is so bright that we are dazzled and confounded by its rays. In a certain sense, before the mind of man can enter into communion with God, God must become man to our conceptions, even as he was incarnate to the bodily eye nineteen centuries ago. This is not saying that God is incomprehensible to us, except in the same manner in which we are incomprehensible to ourselves. "We know not what spirit is, still less what matter is, and least of all, how spirit can be united with matter; and yet it is this union which constitutes our own proper being." We cannot reconcile the absolute unity of God with his omnipresence; we cannot even conceive what absolute unity is; since every thing presentable to sense or imagination is complex, consisting of countless parts, and may be divided and redivided, till the wearied mind refuses to follow the separating process any further. Yet each one of us is known to himself as an absolute unit. I am one, an indivisible Ego, one in my identity, one in my responsibility, one amidst a universe of complexity and change. And yet this unit of con-

sciousness is ubiquitous to the nervous organism which it inhabits, present wherever it feels, and present therefore throughout all its extremities at once, tremblingly alive in every joint, nerve, and fibre. Man is to his own body, as a presence, what God is to the universe. We understand neither; but we know that it is so.

Kant announces only a simple and obvious truth, when he declares that the grounds of proof must be at least coextensive with the thing which is to be proved. The order, the law, the conformity to purpose, the unity of plan, which are everywhere visible throughout creation, great and impressive as they are, are still finite; at least, so far as man's mind can comprehend them and reason from them, they are finite; then they do not, as Kant says, prove the infinite perfections of Him who made them. But they do prove the presence, throughout creation, of a mind commensurate with these wonders, coextensive with the universe, and to which we know of no limits. They do not then disprove the infinity of that mind, but leave this point for the faith which transcends the Things of sense. They impress upon us as distinct a vision of their Author and his attributes as we have of the mind and character of any one whom we have not seen, but whom we judge from his works. This is all the lesson that they impart, for it is all that the intellect of man is capable of receiving.

CHAPTER XIV.

Kant's Groundwork of Ethics.

Kant's "Critique of Pure Reason" does not profess to make a survey of the whole mind of man, but only an analysis of its cognitive faculty; and even this analysis is not intended to be complete, but to be carried so far only as to point out what is primitive and *a priori* in the cognitive act, and thereby to explain the origin, the nature, and the compass of all necessary and universal truth. In like manner, his "Critique of Practical Reason," with its two subsidiary treatises, the "Metaphysics of Ethics," and the Foundation or "Groundwork" of such Metaphysics, is not meant to cover the whole territory of our moral nature, and on this broad basis to build up an entire system of Ethics. Even here, Kant's aim is rather speculative than practical; not so much to furnish a moral guide to life, or to teach man what he ought to do under every combination of circumstances, as again to separate what is primitive and *a priori* from what is empirical in our rules of conduct, and thus, by eliminating all that is merely contingent and prudential in these rules, to display the pure Law of *absolute* moral obligation, primitive, comprehensive, and eternal, binding not only upon man, but upon God himself. Very austere and noble is Kant's conception of such a Law, and, in setting it forth, he seems to burst from the impediments of his usually thick, clumsy, and involved expression, and his style mounts at times without effort into chaste and impressive eloquence. It is an admirable exposition of the theory of duty, pure, elevating, and truthful; I know of nothing superior to it, in theory, except the divine original, which its author seems indeed to have kept closely in view,—the Sermon on the Mount.

Kant leaps at once into the very heart of his subject, by pointing out the distinction between Absolute and merely Relative Good. "There is nothing in the world," he says, "and we cannot even conceive anything out of the world, which is absolutely good, that

is, good *per se*, in all respects, and without exception or limitation, excepting a good Will," meaning thereby a volition, or habit of volition, proceeding from perfectly upright and virtuous intentions, without any admixture of a lower motive, but dictated solely by reverence for the Moral Law. Such a volition may be frustrated, as by palsy or other bodily weakness, even before appearing in any outward act. No matter; the mere *intent* is good in itself, good *per se*, irrespective of success. Or the outward act, though meant for good, may be positively harmful. No matter again; the Will was good, and conscience requires nothing more. Judgment, wit, discernment, or energy, firmness, courage — any high endowment of mind or character — is certainly good and desirable in many respects, but not in all; if not guided and restrained by a good Will, it may work great harm and wrong. Great intellect and an indomitable character, with an evil Will, is Milton's conception of Satan; far from being good, it is devilish. So with all the gifts of fortune, such as wealth, power, honor, even health, general prosperity, and content with one's lot, — all of these may be directed to evil ends; they may foster pride, indolence, insolence, self-conceit; they form only a relative good, relative to the use which is made of them. The sight of uninterrupted happiness itself, if it be adorned by no trait of a pure and good Will, can give no pleasure to a rational and unbiased spectator; and thus a good Will appears as the indispensable condition of the worth and dignity, the real desirableness, even of being happy. Again, some attributes of mind and character are serviceable to a good Will, and may facilitate its operation; such are moderation in our appetites and passions, self-control, and considerate self-examination; these even constitute in part the internal worth, the true respectability, of the person in whom they are manifest. But if detached from a good Will, they may become utterly bad; since the cold blood of a scoundrel makes him not only more dangerous, but in our eyes more worthy of detestation and abhorrence, than if he were a thoughtless, passionate, or reckless evil-doer.

Hence, a good Will is good in and for itself alone; — not for what it produces, not for its utility, not through its fitness for the attainment of any higher end, for there is no higher end; but it is absolutely good, and is therefore to be prized infinitely higher than that which gratifies any desire, — higher even than the satisfaction of all our desires taken together. If, by the special hardship of our lot, and through the penurious allowance we have received from Nature, our grudging step-mother, this good Will is wholly

without the capacity to execute its purpose, even after the greatest effort; (for, observe, this good *Will* is not merely a virtuous *wish*, but it is the conscious strain of what faculties we have, the greatest possible exertion of all means, so far as they are in our power, to bring about the willed result;) — if this good Will, I say, be wholly impotent for its end in view, still, like a diamond, it will shine by its own light, as something which possesses its own full value in itself. Its utility or its uselessness can neither add to, nor detract from, this its *intrinsic* and absolute worth. A *good* outside of the Will, *i. e.*, something aimed at, or a material good, even though it be so respectable as health, scientific or artistic culture, general well-being, etc., is only a *relative* good, not always or necessarily good, not good *per se*.

As this absolute Good is a purpose or intention, and, as such, is wholly internal, having its sole seat within the breast, any admixture whatever with it of an external and merely relative Good thoroughly corrupts and debases it, wholly stripping it of its peculiar character. It then ceases to be *autonomous*, or a Law unto itself, and becomes *heteronomous*, or that which receives the Law of its action from something else, outside of and superior to itself. A mere volition or purpose is not useful for anything; for, as I have said, it is wholly internal, and may not have any outward consequences, or it may have even bad external consequences, without thereby losing its own intrinsic and absolute goodness. And even to say that the outward act, which generally, but not always, follows the volition, is useful, leaves the matter short; for the question immediately arises, — useful *for what?* For obtaining wealth, power, reputation, happiness? But then wealth, happiness, etc., become the end, for which a good Will, a virtuous intent, is only a means; and as a means is only subsidiary to its end, and derives all its excellence from it, the virtuous Will thus ceases to be an absolute, and becomes merely a relative, good. In other words, goodness ceases to be goodness, and wealth, happiness, or some other outward result, becomes the final end and aim, the absolute good; a conclusion which shocks our whole moral nature, and is directly contradicted by consciousness. If, argues Kant, happiness were man's highest good, it would have been more securely gained by instinct than by reason. Instinct makes no mistakes. The brute is always led by the hand, like a blind child, as it were, towards the attainment of purposes of which it is unconscious, the chief purpose always being the preservation of the animal's own life and the continuance of its species. Incapable

either of looking into the future or of judging the past, it knows neither anxiety nor repentance. It lives only in and for the present moment.

Because the will is autonomous, or a Law unto itself, any reference to utility, any consideration whatever either of private or public advantage, just so far vitiates the act, and makes it no longer virtuous. Thus, honesty is undoubtedly the best policy; but he who abstains from cheating merely because it is politic to curb his fraudulent inclinations, is really a dishonest man. Again, to preserve one's life is a duty; but he who does so solely from the love of life is not virtuous, but merely prudent. Beneficence (*bene-facio*) is not benevolence (*bene-volo*), except when one does good to others merely because it is a duty, and without reference even to that secret satisfaction, that joy within the breast, with which one contemplates his own good deeds. If conscience alone did not prompt the act, conscience will dishonor the drafts which are made upon it for self-approbation. The action may be *conformable to duty*, even if the motive of it is only sensuous inclination, *e. g.*, the hope of gaining money, reputation, or future happiness; but only if done *exclusively from a sense of duty*, that is, from mere reverence for the Moral Law, irrespective of all consequences, is it strictly virtuous, or absolutely right.

Hence it is obvious that the Moral Law is purely *a priori*. It discards all reference to experience; it is of absolute and intrinsic obligation, prior to all command; and it is universal, for it admits no exceptions, makes no compromises, and assumes authority over all intelligent beings, whether human or divine. Kant appropriately denominates it the Categorical Imperative. This fundamental Law of the Practical Reason bears the form of an "Imperative," that is to say, a Command; because man is not purely rational, but also a sensuous being, and the senses are generally in active opposition to the reason. It is not, like the maxims of prudence and utility, merely a hypothetical or conditioned command. It does not, like them, say, Do this, *if* you would avoid a whipping; do it, *if* you would go to heaven; *if* you would be happy, *if* you would have wealth, or honor with your fellow men, etc. But it is a "Categorical Imperative," an Absolute Command. It says, Do this, THOUGH the heavens should fall. Do it, though thereby you should lose every thing in this world, and should even forfeit all hope in the world which is to come. Do IT, and think not at all of the consequences. Be just, and fear not. This Law operates upon conduct, because it is instinctively regarded not merely

with approbation, but with reverence and awe; we cannot disobey its behests except with a feeling of shame and self-humiliation.

Accordingly, Kant defines *duty* to be that necessity of performing a certain act which arises solely from *reverence* for the Moral Law. "For any object to be obtained as an effect of my action, I may have a feeling of *inclination* or *liking*, but never of *reverence*, for the very reason that it is an effect, and not an activity, of my will. Just so, I cannot have reverence for any inclination or liking whatever, whether my own, or another's; I can, at the utmost, only approve of it, if my own, or sometimes even love it, if another's, because I regard it as conducing to my own advantage. Only that which is connected with my Will as its ground or reason, never as its effect; only that which does not subserve my inclination, but overpowers it, or, at least, wholly excludes it from consideration; consequently, only that which is a Law *per se*, can be an object of *veneration*, and therefore a command or 'Imperative.' Hence, as an action done from a sense of duty must exclude the influence of inclination, and, with it, of every object of the will, there is nothing left to determine the will except, objectively, the Law, and subjectively, pure reverence for this Law, and a determination to obey it irrespective of any inclination whatsoever."

Reverence, Kant insists, is a state of mind specifically different from all other feelings, in that it is self-created, through a conception of the Reason. What I immediately recognize as a Law unto myself, I regard with reverence, which signifies merely the consciousness of the entire subordination of my will to its dictates, without the intervention of any influence on my senses. Hence, this feeling is never directed towards a *person*, except in a merely figurative sense, when the character and actions of an individual are considered as a mere embodiment or example of the Moral Law. Even the Saviour of mankind asked rebukingly, "Why callest thou me good? There is none good but one, that is, God."

This doctrine is admirably illustrated by Kant in an eloquent passage, with which many readers are familiar, as it is presented in a translation by Sir William Hamilton. "Two things there are, which, the oftener, and the more steadfastly, we consider them, fill the mind with an ever new and ever rising admiration and reverence. — *the* STARRY HEAVEN *above*, *the* MORAL LAW *within*. Of neither am I compelled to seek out its reality, as veiled in darkness, or only to conjecture its possibility, as beyond the sphere of my knowledge. Both I contemplate lying clear before me, and connect both immediately with the consciousness of my own existence.

The one begins from the place I occupy in the outer world of sense; expands beyond the bounds of imagination the connection of my body with it into a union with worlds rising beyond worlds, and systems blending into systems; and protends it also into the illimitable times of their periodic movement, their commencement and duration. The other begins with my invisible self, with my personality; and represents me in a world truly infinite indeed, but whose infinity can be tracked out only by the intellect, and my connection with which, unlike the fortuitous relation wherein I stand to all worlds of sense, I am compelled to recognize as universal and necessary. In the former, the first view of a countless multitude of worlds *annihilates*, as it were, *my importance as an animal creation*, which, after a brief and incomprehensible endowment with the powers of life, is compelled to refund its constituent matter to the planet — itself an atom in the universe — on which it grew. The other, on the contrary, immeasurably *elevates my worth as an intelligence;* and this through my personality, in which the Moral Law reveals to me a life independent of the animal kingdom, nay, of the whole material world: at least, if it be permitted to infer as much from the regulation of my being exacted by a conformity with that Law, which is not restricted by the conditions and limits of this life, but stretches out to eternity."

But a difficulty seems immediately to arise; for how are we to ascertain the content of the Law? How can we know what are its dictates, what it enjoins and what it forbids, if we cannot have recourse to experience? It would seem that the Moral Law, like the Categories, must be a mere blank, an empty form without matter, if there be not presented to it an empirical content, a manifold of intuition. Kant perceives the difficulty, and resolves it in a very ingenious and characteristic manner. He sums up all morality into one precept, which is so expressed, that its mere form of universality seems to render it definite, and thereby to supply the lack of matter. Thus speaks Reason absolutely *a priori: Let thy rule of conduct in every case, be such, that it might become a universal law, to govern the actions of all mankind.* More briefly and simply expressed: Always act as you would wish every intelligent being, God himself included, to act, if he were in your place. And yet the problem is not here really solved, for this precept assumes, that my duty is made known to me only through my previous knowledge how all intelligent beings ought to act, if they were under precisely the same circumstances. How did I acquire this previous knowledge? How is it easier for me to

know what all mankind ought to do, than to recognize what is my own particular duty? Obviously the Utilitarian will answer, that a regard to consequences, that is, the consideration whether the proposed action is, or is not, expedient in the long run, or as a general rule, must determine what I ought to do, through pointing out what any man, any intelligent being, ought to do in a similar case.

This will appear more clearly, when we examine the particular cases adduced by Kant as illustrations of the mode of applying his universal precept. Suicide is the first instance, and is a very good one, since it is not easy, under any system of ethics, to demonstrate that this act in all cases is wrong. Kant argues thus. An individual harassed by a series of evils, sick of life, and believing his existence to be as useless to others as it is wearisome to himself, proposes to kill himself; but he first asks, whether this principle of suicide under strong temptation is fit to become a universal law; and he is at once obliged to answer, that it is not so fit; since the universal practice of self-destruction would make the world a desert and reduce creation to chaos. Now I am not so sure of that, since the universal law would only require all other men to do likewise, *if they were placed under similar circumstances;* and it is hardly conceivable that they should be so placed. But waiving this difficulty; is it not obvious, that suicide is here proved to be a crime in my own case, because it would be very inexpedient as a general rule, for then it would depopulate the earth? The Utilitarians themselves do not hold an expedient action to be criminal, except it be inexpedient on the whole, or as a universal principle of conduct.

Kant's second instance equally fails to substantiate his theory. A person in great need tries to borrow money, knowing that he cannot repay the loan, but being also aware that nothing will be lent to him, if he does not stoutly promise that the sum shall be repaid within a short time. Is he justified, then, in making a promise which he knows will not be kept? Certainly not, answers Kant; for if this were a universal law, that is, if everybody did so, all faith in promises would be destroyed, and nobody would ever lend money again. But here, too, the act is proved to be criminal in any one case, because it is assumed to be inexpedient in the long run, or as a general rule; and thus the fundamental principle of utilitarianism is not destroyed, but established.

Those moralists who are not utilitarians, of course, will correct this portion of Kant's theory in another manner. They hold that

not only the Form, but in some measure the Content, of the Moral Law is made known to us *a priori*. Conscience not only tells me that such an absolute Law exists, and therefore that I "ought," irrespective of all other considerations whatsoever, to follow its dictates, but it makes known to a certain extent what those dictates are. It tells me what purposes are right, and leaves me to ascertain from experience the course of conduct by which those purposes can be most effectually carried out. This is only saying that, like our other Innate Ideas, the Law within the breast needs culture and development. Its liability to perversion and abuse proceeds chiefly from a neglect of the duty of self-examination. Strange as it may seem, we are often mistaken in respect to the motives and purposes which direct our conduct. So blinding is the influence of self-love, so insidious are the promptings of passion and appetite, that we often fancy that we are acting from a sense of duty, when we are really animated by ostentation, the pride of opinion, selfishness, or revenge. Conscience may even lapse into a state of morbid sensitiveness, or be stimulated into the fever of excitement which generates the cruelties of fanaticism and party-hate. Such perversions and abuses need to be corrected by the teachings of experience, that is, usually by utilitarian considerations; but the liability to them does not disprove the innateness and independence of our sense of right.

Notwithstanding the strict and absolute necessity which, as all necessitarians believe, governs every act of the will, it is still true, as both Kant and Schopenhauer are obliged to confess, that all our actions are attended with a distinct consciousness, that they originate in ourselves and are in our own power, so that we are morally responsible for them. But responsibility implies that we might have acted otherwise, and therefore presupposes freedom. To get rid of this contradiction, and thereby to reconcile the doctrine of necessity with this consciousness which involves freedom, Schopenhauer adopts Kant's distinction between man's *empirical character*, which is a phenomenon, and as such, is all that is directly manifest to observation, and his *intelligible character*, which is a noumenon, or *ding-an-sich*, and, as such, is the inmost kernel of his real being, though we know it only indirectly.

It is a familiar fact, that the same cause does not always produce the same result, but that its action is necessarily modified by the peculiar nature or character of that on which it operates. A change in anything is the joint result of two factors, namely, its proper cause and the thing's own nature or internal constitution

Thus the application of fire to powder explodes it; to wax, melts it; to clay, hardens it; to water, converts it into steam, etc. In like manner, a given motive, say, the desire of wealth, when acting on different persons, though with the same strength or intensity, may lead to very dissimilar actions. It induces one man to steal; another, to be so parsimonious as to deny himself the ordinary comforts of life; a third, to be indefatigably industrious; a fourth, to envy or hate those who are richer than himself; and so on. Why is this great disparity of results, when the motive is the same, and is equally strong? Why are the resultant actions so dissimilar, even when each agent's *empirical character*, which, as a phenomenon, is open to observation, and which is due to the shaping influences of education, example, opportunity, and other external circumstances, is apparently the same? It is because each agent's *intelligible character*, which was born with him, and makes him what he is, which is the noumenon or *ding-an-sich* of his inmost being, and so is his real Self, and which, precisely because it is a noumenon, is unknowable and inscrutable by others, and even by himself, — because this intelligible character, I say, is original and peculiar to himself, and is precisely that which differentiates him from every other human being. Also, because it is a noumenon again, it exists outside of Time, Space, and Causality, which are merely phenomenal forms of Sense or of the Understanding, and hence it cannot be necessitated or compelled, but is absolutely free. It does not exist in successive states or modes of its own being; for, being out of Time, it is also incapable of existence in succession, since without Time there cannot be succession. Hence, its previous or antecedent condition cannot produce or cause its subsequent state. In itself, *per se*, it is unchangeable. Or still more briefly, being outside of Causality, it cannot be an *effect*, that is, it cannot be caused or modified by anything out of itself. And yet, as it is my only real being, the inmost core of my existence, my primitive and inborn Self, it must be present as a factor, it must enter as an element, into every change and every action of which my phenomenal Self, my empirical character, is capable. What the Necessitarian asserts is true, that each man's empirical character is formed by previous circumstances. If he becomes a liar, for instance, among the causes which have made him such will probably be found defective education, bad company, the force of habit, and the presence of strong temptation when he first uttered a falsehood. Now, with this *acquired and empirical* character, whenever a sufficient motive or temptation comes along, though it would not be suffi-

cient for another and better educated man, this one *cannot help* telling another lie. So far, he is not free, and the Necessitarian is right. And in like manner, every empirical character, when a given motive or desire is presented to it, *must* act as it does, must yield or resist, precisely like a stone when operated on by lever or pulley. The truthful man shuns the falsehood just as necessarily as the habitual liar utters it. Why, then, does he feel remorse or self-gratulation for what he could not help? Why does conscience tell him what he *ought* to have done, instead of what he *did* do, though he does not censure a stone for rolling down hill, nor water for tumbling over a cataract; and his own action was not one whit less necessary than theirs?' Because, answer Kant and Schopenhauer, this same conscience rightly tells him that he IS responsible, — not indeed for doing this particular act, since *this* he could not help, — but for not being a better man, for not having a different empirical character, which would have rendered it impossible for him to yield to such a motive, or to succumb to this temptation. He IS responsible, not *for what he does*, but *for what he is*. *Operari sequitur esse*: the action necessarily results from the being of him who did it. Blame not the action, then, but the man for being capable of such an action. Whip him, not for telling this particular lie, but for being a liar at heart; not for stealing this horse, but for being a thief or rogue in grain, in his inmost nature. For, this inmost nature, his real Self, his *ding-an-sich*, is his *intelligible character*, which, as a noumenon, is in some inscrutable manner emancipated from the laws of Time and Causality, from the operation of motives, and is therefore absolutely free. He *might* have been a better man than he is, and therefore he *ought* to have been better. For this intelligible character is the primitive element, the original factor, out of which his empirical character was formed, and on which it is based and consequently, if it were other than it is, his whole subsequent moral nature, and his whole series of actions, would be different. And thus the deep and dark problem of fixed fate and free-will is solved, the two contradictories being reconciled with each other. As a phenomenon, man is just as much subject to necessity as a stone; he moves only as he is moved. As a noumenon, he is lord of himself and his whole conduct; nothing can move him.

Si fractus illabatur orbis,
Impavidum ferient ruinæ.

He is free, he is responsible, he merits praise or blame. *'Du sollst, also du kannst.*

Freedom is a power to act independently of any cause operating so as to compel it to act; that is, it is an unconditioned causality, a First, or primitive cause. Such an unconditioned cause is never empirically made known, and therefore is never cognizable. Only phenomena can be objects of cognitive judgments, and therefore freedom cannot be either affirmed or denied. Empiricism is as little justified in denying freedom as Idealism is in affirming it. This is proved in the third Antinomy. If the Critical Philosophy denies the cognizability of freedom, it does not thereby also deny its existence. *That* would be Dogmatism. Neither does the "Critique" assert that freedom is unthinkable; for we can think anything that does not involve a contradiction. An absolutely limited space, beyond which there would be no space, and a completed time, beyond which there would be no time, *are* unthinkable; for our intuitions of time and space are unlimited. But freedom, an unconditioned causality, is perfectly thinkable; for since cause and effect are not *in eodem genere*, nay, are radically unlike, there is no contradiction in supposing that effects, which are conditioned, should have a cause which is unconditioned. Freedom is thinkable, then, and is even possible, though not as a phenomenon, or object of experience; and therefore it is not cognizable. In certain cases, however, freedom *is* unthinkable. It is unthinkable as a part or member of the world of sense; it is impossible as an object of experience. And this holds true both of the external world of space, and of the interior or psychical world of time. If the causes are material, then the machine which is thereby moved is a mechanical automaton; if they are psychical, if they are motives, then the machine is a spiritual automaton. Such automata are the Leibnitzian monads. They are, it is true, driven by causes which are within themselves; but they are not therefore any more free than a smoke-jack, which, after it has once been wound up, is necessarily kept in play from within, by its own internal machinery. Then freedom is thinkable, not as a phenomenon in experience, but as an intelligible cause, an intelligible character, a noumenon. Even thus, it is not cognizable, for noumena are incognizable; but it is thinkable, and therefore possible. And our feeling of responsibility necessarily assumes, or postulates, that it is real. Moral obligation negatives incapacity. *You ought, therefore you can.*

The Will, as such, must from its very nature have some end in view, something to strive for; and this something is its Good, or its principle of action. The nature of this Good depends upon

the constitution of the Will which seeks for it. If the Will be empirical and heteronomous, it seeks for this good in some external object or state, which experience has pointed out to it as a source of pleasure or happiness. Such are wealth, power, leisure, sensual enjoyment, the gratification of any passion or desire for the things of this world. So far as the Will strives for such ends, it is obviously empirical, having experience as its sole guide, and heteronomous, because it is not then an end unto itself, but finds something outside of itself, which becomes a law unto it, because supposed to be necessary for its well-being or enjoyment. Every such end is merely a contingent and temporary good, dependent on our ever-changing desires and moods of mind, and on the circumstances of the moment. But the pure Will, which is an end unto itself, and which recognizes no principle of action but reverence for the Moral Law, seeks the unconditioned or absolute Good, not dependent upon anything, but good *per se*, the same yesterday, to-day, and forever. This is the highest good, the *summum bonum*, which the ancients discussed so earnestly, and tried to fix with precision. What are its elements, according to Kant?

They are two, perfect virtue and perfect happiness; the former, because it is the supreme Good; the latter, because the *summum bonum* must also be the consummate or perfect Good, and therefore include in itself all other goods, such as the useful, the agreeable, peace of mind, content with our lot, and all other sources of happiness. The difficulty is, and it is the antinomy of Practical Reason, to reconcile these two elements with each other, that is, to make perfect virtue compatible with perfect happiness. The ancients endeavored to effect this combination by the analytic method, proving the one to be a necessary element, companion, or consequence of the other, so that by finding one we necessarily attain both. Thus, the Stoics taught that perfect virtue is at the same moment perfect happiness, the truly virtuous man needing nothing, and desiring nothing, beyond the consciousness of his own uprightness. The Epicureans, on the other hand, maintained pleasure to be the highest good, and that virtue is found to be one of its necessary elements or concomitants. But Kant maintains, and with reason, that two so heterogeneous notions cannot be found thus chemically interfused and combined, all experience going to show their frequent entire separation from each other. Neither are they related to each other as cause and effect, since the attainment of happiness is no proper motive for the exercise of

virtue, and, in this world at least, perfect integrity does not insure perfect felicity. Too many also find their happiness in something not coincident with the moral law.

Kant seeks a synthetic union of the two elements of the *summum bonum* in the noumenal or intelligible world, since it cannot be found in the world of phenomena or sense. As rational beings, we are *noumena*, or beings *per se*, citizens of a supersensuous world, where the conflict between virtue and happiness does not exist. The highest good is to be realized, not as a means for any ulterior and higher purpose, but as itself the ultimate and highest end or aim of pure Reason. As such, it is unconditionally or absolutely necessary that this end should be attained; yet this is not a physical, but a moral necessity. The realization of the highest good is morally necessary; therefore, it is also morally necessary that the conditions should exist under which alone the highest good can be realized. He who wills the attainment of the end must also will the conditions without which such attainment would be impossible. In other words, the Practical Reason, the Moral Law, postulates, or absolutely requires, the necessary means for the attainment of the highest good, that is, of perfect virtue united with perfect happiness.

What are these necessary means? They are two, the Immortality of the Soul and the Being of a God. Without the former, perfect virtue would be beyond our reach; without the latter, perfect happiness would be unattainable. In this life, in this phenomenal world of sense, virtue is always a struggle and an effort — a perpetually recurring contest with temptation and sin. The victory over them is never final; we can never sleep upon our arms, but must be constantly up and doing, in order to chastise our selfish desires and keep down our rebellious passions. Now, the virtue which is thus perpetually assailed, and which can be kept up only by ceaseless effort and warfare, is at best limited, contingent, and incomplete; it cannot be made perfect *except in an infinite lapse of time.* Holiness, that is, perfect virtue, is possible *only in an eternity* of being. Consequently, the highest good, if it is to be realized by the human will, postulates by moral necessity the endless duration of human existence, that is, the Immortality of the Soul.

Further still; the highest good requires consummate happiness as the necessary consequence, the inevitable adjunct, of perfect virtue; and this end cannot be obtained without the being of a God. The constitution of the universe, the whole current of the

world's affairs, must be made to harmonize with the absolute requirements of the Moral Law. The conditions of such harmony do not exist in man; he is not the creator and governor of the universe. Happiness is largely dependent upon external conditions, on the conformity of physical law and the outward course of events, not only with the dictates of the moral law, but with the needs and requirements of our whole complex being. Such a conformity can be brought about only by an Author and Governor of nature, who, as such, must be distinct from Nature, because he rules it; who must also be omnipotent, since any limitation of his being would negative the perfect conformity which is requisite; intelligent, because he must act from a purpose and with a knowledge of man's nature; and holy, because his purpose must be the realization of the supreme Good and the union of perfect felicity with perfect virtue.

Hence we see that the three Ideas of Pure Reason, Freedom, Immortality, and the Being of a God, which the merely speculative Reason, on theoretical grounds alone, found itself incompetent either to establish or to disprove, are now presented as firmly rooted in our moral nature, — necessary postulates or assumptions of that voice of conscience, which claims absolute authority to direct our whole conduct. These Ideas then rest, not on knowledge, but on faith, on moral certainty, on that veneration for the law within the breast, without regard to which man becomes a brute or a demon, and this world a chaos.

CHAPTER XV.

Positivism. — Relations of what is called Science to Philosophy.

The history of philosophy is, in great part, a record of the oscillations of the human mind between extreme opinions. In successive periods, the pendulum swings to and fro, describing longer or shorter arcs according as the circumstances of the age have developed more or less activity of thought. We have seen that the philosophy of the eighteenth century was, in the main, a reaction from that of the age which preceded it, and, as such, that it was a dreary aggregate of the baldest empiricism, materialism, and unbelief. But thoughtful and earnest minds could not long remain content with the mockery, the sophistry, and skepticism of Voltaire, Diderot, David Hume, and Condillac, especially after their doctrines had largely contributed to the downfall of church and state in France, and brought all the institutions of society into peril throughout Europe. The current of opinion turned in the opposite direction, and the rise of what is called the Scotch philosophy, which is eminently conservative in doctrine, was hailed with joy both in England and France. Royer Collard, Maine de Biran, and Cousin revived a knowledge of Descartes and Malebranche; Sir William Hamilton, as we have seen, repeated Pascal, and was also largely indebted to Leibnitz and Kant. During the first third of the present century, materialism and skepticism became generally discredited, and the doctrines of theism and the freedom of the will were taught in all the schools.

The influence of German philosophy, for more than half a century after the publication of the "Critique of Pure Reason," was restricted, in the main, to Germany itself, partly because comparatively few persons out of the country were familiar with the language, but still more on account of the abstruse jargon of technicalities in which Kant and his immediate successors, the philosophers of the Absolute, saw fit to enwrap their meaning. They continued to be the guardians of an occult science, which had lit-

tle meaning or direct influence outside of the universities and the schools in their own land. Even eminent scholars and thinkers, like Dugald Stewart and Sir James Mackintosh in England, and Madame de Staël and Degerando in France, either neglected German philosophy altogether, or discussed it in a manner which betrayed only their ignorance of the subject. As we shall see hereafter, the tide of opinion in philosophy had its ebb and flow in Germany no less than elsewhere; but this movement of the waters was hardly perceptible from foreign shores. Not till about 1850 were Kant, Schelling, and Hegel so far studied and understood by foreigners, that their influence could be felt throughout Europe. And this curious result has followed, that they began decidedly to affect the course of thought in other countries, only after their power and reputation had considerably waned at home.

In France and England, within our own day, we have witnessed another great swing of the pendulum. A reaction against Reid, Stewart, and Hamilton, against Maine de Biran and Cousin, has brought back in all its essential features the philosophy of the eighteenth century. Once more, we have a period of pretended illumination, an *Aufklärung*, or clearing up of old prejudices, and also a war to the knife against religion and the Church. Once more, the methods and the doctrines of empiricism and materialism seem to have the ascendency, and aim to control the thought of the age by the arrogance of their pretensions, and by the spirit of propagandism with which their followers are animated. As the former period was denominated the Age of Reason, the present boastfully calls itself the Age of Science. Mr. Charles Darwin only repeats Helvetius and Lord Monboddo, when he tells us, that "man is descended from a hairy quadruped, furnished with a tail and pointed ears, probably arboreal in its habits, and an inhabitant of the Old World." Herbert Spencer teaches us, "that feeling and nervous action are the inner and outer faces of the same change;" and "having contemplated these changes on their outsides," as chemical disturbances propagated through any series of molecules in the substance of the nerves, "we have to contemplate them from their insides," as emotions and other states of consciousness. As one argument to support this broad conclusion, he cites the surprising fact, "that as nervous action occupies appreciable time, so feeling occupies appreciable time;" though the same analogy would prove that trundling a wheelbarrow does not differ from reading an epic poem. Then he develops at great length the noted hypothesis of

Condillac, respecting the automaton fashioned like a man, and shows how these nerve-changes, or sensations, may be gradually developed into all the knowledge and feelings which occupy the human mind. Mr. Darwin seems to hold that a conscience may be developed in a baboon, and says expressly, that "a pointer dog, if able to reflect on his past conduct [a very significant proviso], would say to himself, I *ought* (as indeed we say of him) to have pointed at that hare, and not have yielded to the passing temptation of hunting it." Mr. Spencer literally follows David Hume, when he asserts that "the illusion" of the freedom of the will "consists in supposing, that, at each moment, the Ego [or the psychical conscious Self] is something more than the aggregate of feelings and ideas, actual and nascent, which then exists." And he blunders still more wofully when he asserts, that the "liberty to desire or not to desire is the real proposition involved in the dogma of free will;" though Locke, Reid, Stewart, and Hamilton had cited the patent facts, that we often desire one thing and will another; that opposite desires, but not opposite volitions, may exist in the mind at the same moment; and that we will only what we believe to be within our power, though we often desire what we know to be beyond our reach.

Mr. Huxley pithily expresses the necessitarian doctrine, when he protests, "that if some great Power would agree to make me always think what is true and do what is right, on condition of being turned into a sort of clock, and wound up every morning before I got out of bed, I should instantly close with the offer." The ingenious Mr. Maelzel, who, nearly a century ago, constructed a wooden man, about three feet high, that played a good game of chess, also fashioned a smaller puppet, which pronounced quite distinctly a number of words. Now, it matters not at all, most persons will think, whether a sentence uttered by this puppet be true or false, since there would be just as much merit, or demerit, in the one case as in the other. And if all mankind were wooden images so constructed, I think that the difference between truth and falsehood, or between a right action and a wrong one, would not concern them in the least, and in fact would have no meaning for them. Mr. Huxley's remark, if intended to be taken seriously, merely shows the lamentable cynicism, which is the only state of mind that can logically result from belief in a materialistic and fatalistic theory of the universe. A Danton or a Desmoulins might utter it, while projecting the September massacres and the reign of the guillotine; for what sensible man would feel remorse of conscience on beheading dolls and puppets?

The doctrine of Descartes, that all the animals below man are mere machines, simulating life, contributed largely among his disciples, we are told, to the pitiless treatment of brutes, and to the beginning of that detestable practice of vivisection, renewed in our own day, and now much in vogue, which caused an eminent French surgeon many years ago to be stigmatized as "the hellish Magendie." An eminent Cartesian, being in company with Fontenelle, received a poor dog, then big with pup, that came to fawn upon him, with so severe a kick that the animal yelped with pain; and when Fontenelle showed some pity and indignation, the philosopher coolly observed, "*Eh quoi! ne savez-vous pas bien que cela ne sent point?*" Logically, the Cartesian was right; believing the dog to be a mere automaton, there was no more brutality in the act, than there would have been in kicking out of one's path a broken rat-trap. And if human beings also, as the Positivists teach, are only curiously fashioned clocks or locomotive engines, I cannot see that there would be either wrong or harm in maiming or killing any number of them. An Attila or a Genghis Khan would then no more deserve reprobation, than a San Carlo Borromeo or a Howard would merit praise.

The examples here cited are probably enough to show that, in all its essential features, the "scientific" materialism and skepticism of the present day, instead of evincing progress, would carry us back to the last century, being merely a revival of the philosophy of the French Encyclopedists. In this respect, as in so many others, we may find reason to think that the pretended new lights are but new editions of old darkness. Perhaps the parallel here indicated may be best carried out and illustrated by examining, at some length, that system of philosophy which, though really of old date, has first acquired in our own times the name of Positivism. The discussion will be more interesting in this place, because it will bring again into view, in their practical application, some of those great truths underlying our intellectual and moral nature, which were first systematically set forth and illustrated by Immanuel Kant. Both the heresy and the confutation of it properly belong to the eighteenth century.

Notorious as it has become, Positivism pure and simple is not in good repute nowadays, and finds very few, perhaps not more than half a dozen, thorough-going adherents. In fact, since the death of its French founder, I hardly know any writers or thinkers of some note and importance, except Mr. Congreve, Mr. Harrison, and Dr. Bridges in England, and perhaps M. Littré and one or

two others in France, who are now willing to be called Positivists, and as such, are still zealous and thorough-going advocates of the whole body of doctrine which was first promulgated, as he says, by Auguste Comte, though the real merit or demerit of the largest portion of it is due to David Hume. Even Mr. G. H. Lewes, author of two ponderous but well written volumes on the "History of Philosophy," though an earnest proselyte, as it seems to me, of Hume and Comte on all important points, or for general substance of doctrine, still does not accept the name of Positivist, perhaps because he prefers to be considered as an independent thinker. And Mr. Huxley, after giving an amusing account of the attempts made by two eminent speculatists to shake off the odious appellation, takes an opportunity of repudiating Comtism in his own behalf, and, he might have added, of taking leave of it in a very characteristic manner, by affixing to it a stinging epigram. He designates it, with no less truth than point, as "Catholicism *minus* Christianity."

But how happens it, then, one will naturally ask, that a system of philosophic thought, first promulgated under the name of Positivism about half a century ago by a partially insane French teacher of mathematics, which cannot now boast a corporal's guard of devoted and thorough-going adherents, and is even scornfully repudiated in name by all the eminent speculatists and *savans*, who certainly have no predilection for conservative doctrines either in theology or philosophy, — how happens it, I say, that such a system has become, in the common estimation at least, at once so prevalent and so formidable; — a portentous exhibition of modern skepticism, menacing alike our ordinary beliefs, our philosophical creed, and our religious hopes; buttressed, as is supposed, by some of the best accredited results of physical science; fortified, as is feared, by the secret or avowed adhesion of a majority of the most distinguished physicists and naturalists, especially geologists, physiologists, and chemists; growing in authority, spreading in influence, darkening in aspect, till it seems to overspread both the earth and the heavens with gloom, and to shut out the future into utter darkness; a system, to adopt Jean Paul Richter's language, which makes "the universe, human beings included, to be an automaton, God to be the uniformity of physical law, and man's future a coffin?" I state the case strongly, but not too strongly, I think, for the convictions of some and for the apprehensions of all. Positivism denies the efficacy of prayer and the being of a God; and as it not only rejects, but scoffs at, the doctrine of the freedom of the

human will, it annuls the precepts and the sanctions of morality, loosens the bands of marriage and the family, and thereby shakes the very foundations of society. It is atheism and fatalism combined. Here surely is a remarkable phenomenon, and one deserving of attentive study. What means this strange combination of seeming weakness and formidable strength?

We begin an answer to this question by remarking, that the name Positivism has two perfectly distinct meanings: — the first, a broad and comprehensive one, including the whole body of doctrine taught by Auguste Comte in the six ponderous octavo volumes, averaging about eight hundred pages each, denominated by him "the Positive Philosophy." In this sense, Positivism hardly merits notice, for it does not now count over half a dozen proselytes among men of any repute as sober and earnest thinkers; since it includes, first, a scheme of classification of the sciences, in which all that is true and valuable belongs to Descartes, while Comte's own part in it is meagre, not sufficiently worked out, and does not satisfy the conditions of the problem. Secondly, it includes the law of the three successive stages, through which all the sciences have passed, or are passing, and which also, necessarily constitute three distinct epochs in the history both of every individual mind and of the human race. First is the theological stage, in which all events, all causation, are referred to the action of super-human beings. Second is the metaphysical period, in which causative power is ascribed to metaphysical entities or abstractions, regarded as the occult sources or principles of phenomena, such as Substantial Forms and Quiddities, — Nature's horror of a vacuum, and even the modern doctrines of the attraction of gravitation, chemical affinity, and the like, when delusively considered as denoting real forces or powers, and not as a mere classification of results produced by these fictitious causes. The third stage is that of Positive Science, so called, in which these names are recognized as mere abstractions or fictions, and both science and philosophy are restricted to the observation, classification, and prevision of phenomena.

Here, again, all that is peculiar to Comte is the assertion, that these three stages or states of mind, or, as they may more correctly be described, these three conceptions of the phenomena of the Universe in respect to their origin or efficient cause, are necessarily *successive* developments of thought and science, and thus constitute a real progress from error to truth, the first belonging only to the infancy of speculation, and therefore being naturally

and inevitably outgrown, as the mind matures and knowledge advances; while the second is equally temporary, being merely a step of transition to the third, at which epoch only the mists of superstition and metaphysical illusion disappear, and physical phenomena assume their true aspect, as seen through a clear atmosphere. But this assertion is not true, is not even plausible, and its falsity is now almost universally admitted. These three modes of looking at the phenomena of nature are not *successive* stages in the history of thought; they are not even antagonistic to each other, so as to be mutually exclusive. They so far harmonize as to hold peacefully a divided empire, each being applied in its own province; that is, to its own peculiar class of objects and events, or wherever it is most fitting. They coexist now in many, perhaps in most, thoughtful and inquiring minds; they have so coexisted in every age since the dawn of science and religion in the East, and in Greece. Nearly all speculatists and students of nature refer one class of phenomena to personal agency, either human or divine; another class to what are called second causes or intermediate agencies, the existence of which is admitted, even when they are held to be undiscoverable; while a third class are merely observed and classified according to their relations and affinities with each other, their origin and inmost nature not becoming subjects of investigation, because confessed to be inscrutable. Indeed, any mind would be lamentably deficient in breadth of view and catholicity of doctrine, which did not philosophize and interrogate nature under each of these three aspects, or with reference to such possible threefold classification of its phenomena.

Thirdly, Positivism in its broad sense includes Comte's development of his philosophy into a theology and a church; a theology which admits neither a revelation nor a God, but inculcates the systematic worship of that gigantic idol representing Humanity at large, or the whole human race, which Hobbes of Malmesbury called "the Leviathan," but which is here denominated "the *New* Supreme Being." In the church which he instituted for such worship, Comte puts himself in the place of Pope or High Pontiff, and a rather disreputable female, the wife or widow of a galley slave, who was the object of Comte's fervent love and adoration for one year only before her death, is installed as chief of the Positivist saints, his prayers or acts of adoration being directed, during the latter part of his life, not to her "departed spirit" certainly, for the immortality of the soul is not one of the doctrines of the new church, but to her memory. This is the theology and

the ecclesiastical organization which Mr. Huxley properly stigmatizes as "Catholicism *minus* Christianity." As a pitiable exhibition of insane fancies and monstrous self-conceit, it deserves no further notice.

Now, on each of the three points thus far enumerated, Positivism is so far from being formidable, that it is simply contemptible. In respect to each of these doctrines, it counts very few adherents, and makes no converts. But after throwing overboard all this trash, together with some minor speculations closely affiliated with it, for we cannot here enter into details, there still remains a body of doctrine properly denominated Positivism in the narrower sense, which is, however, really of metaphysical origin and purport, its parentage in modern times being distinctly traceable to David Hume, from whom Comte borrowed it, and, as usual in such cases, marred and disfigured it in the borrowing. Hume knew little or nothing about natural history or physical science; he was a metaphysician pure and simple, a teacher of skepticism on metaphysical grounds. But his system was adopted and applied by Comte as, in a special sense, *the* Philosophy of Physical Science; and in this respect, Comte has been followed, not only by such speculatists as John S. Mill, Herbert Spencer, and Mr. Lewes, but by a large and increasing number of naturalists and physicists, who, of course, only in this narrower sense are earnest and thoroughgoing Positivists. It is equally clear, that the system thus understood is not specially corroborated by their adhesion to it; for, as I have said, it does not rest upon physical, but upon metaphysical grounds. Even its title is a misnomer; far from being *positive* in character, it is essentially negative; it is not a philosophy of science, but of nescience.

For a precise and succinct statement of the Positivist doctrine in this narrower sense, I borrow the language of its most zealous and authoritative adherent, Mr. John S. Mill: "We have no *knowledge* of anything but phenomena; and our knowledge of phenomena is relative, not absolute. We know not the essence, nor the real mode of production, of any fact, but only its relations to other facts in the way of succession or similitude. These relations are constant; that is, always the same in the same circumstances. The constant resemblances which link phenomena together, and the constant sequences which unite them as antecedent and consequent, are termed their laws. All phenomena without exception are governed by invariable laws, with which no volitions, either natural or supernatural, interfere. The essential nature of phenomena, and

their ultimate causes, whether efficient or final, are unknown and inscrutable to us."

But if thus understood, Positivism is only another name for Empiricism, or the doctrine that all our knowledge comes from experience through the senses; and as such, it may fairly claim the unanimous assent of men like Huxley and Tyndall, Darwin and Helmholz; for it is a correct statement, it is the truth, in relation to their "science" *as they understand it*, and, in fact, as it is commonly understood. If we leave out of view the fundamental principles upon which it rests, and which it is no part of its business to investigate, since every science must take its own first principles for granted, mere Physical Science, even when so construed as to include all branches of Natural History, relies exclusively upon, and is advanced solely by means of, observation through the senses and experiments addressed only to the senses. Here, in its own domain, sense reigns paramount and holds undivided sway. Physical Science recognizes no facts which cannot, directly or indirectly, be made evident to sense. All its modes of verifying facts, that is, of discerning the false from the true, are founded, in the last resort, solely upon the testimony of the senses. Hence, when the physicists and naturalists say, as they now frequently do, 'Science knows nothing of this or that conclusion; Science perceives no *substance* underlying the phenomenal qualities of things; Science never has found, and never can find, any *efficient causation* binding events together, but observes only their invariable sequences; Science never ascends to the *origin* of things, and hence has nothing to say about *creation;* Science discerns no *purpose* or *intention*, no *final cause*, in nature; Science finds no proof of the existence of that being which each of us calls *myself*, except he thereby means *my body;* Science beholds no evidence of the being of a God;' I say, when Mill, and Huxley, and Tyndall, assuming to speak for all Physical Science, make these assertions, or rather these avowals of ignorance and incompetence, *they tell nothing but the plain truth*, and therefore, no wonder that they find many adherents among men of similar pursuits and studies with themselves. These disavowals, these negative assertions, which constitute the whole doctrine of nescience, or Positivism in the narrower sense, convey only the harmless truism, that man's outward senses testify to none of these things. *Quis dubitavit?* We cannot see, touch, hear, smell, or taste either Substance, or Cause, or Self, or God. From the testimony of sense alone, not supplemented by any other source of knowledge, we cannot even legitimately infer the being of either

of these four, or the creation of the universe, or the reality either of efficient or final causation. Thus far, Positivism has gained the day, since no one appears to contest the case.

But in this doctrine, whimsically termed Positive, though it is exclusively negative, much more is implied than is openly stated; and it is with these implications that we are now concerned. The "Science" which thus avows its incapacity to penetrate beneath the surface of things, because it cannot go beyond the domain of the senses, is mere *Physical* Science. The implied but unfounded assumption is, that it is *science* in the larger sense, or human knowledge itself, which is compelled to make these humiliating confessions. "Science" is only the Latin equivalent for our good Anglo-Saxon word, "knowledge;" but common use now makes it a mere synonym of "Physical Science," which is only a fraction of human knowledge. The Positivist avails himself of this poor verbal ambiguity, in order to discredit and rule out of court all metaphysical and moral science; that is, to reject the whole testimony of consciousness, as well as the fundamental truths which are the first principles alike of mathematics, logic, and philosophy, — nay, even of the whole edifice of human knowledge. He fails to perceive that, herein, he adopts a suicidal policy; for Physical Science itself is based upon these fundamental truths, and without them can make no progress, and cannot even verify what it has already discovered and systematized. Descartes aptly compared the whole of man's knowledge to a tree, of which Metaphysics are the root, physics are the trunk, and the other sciences the branches. Every science, except Metaphysics, must begin by taking something for granted; it cannot verify its own first principles. This task it relegates to Metaphysics, which is therefore rightly termed the science of first principles.

Indirectly we find this assertion confirmed by the well-known fact, that these dogmatical specialists, in their crude attempts to confirm and explain their positive denial of all hyperphysical truths, solely on the negative ground that their special "science" knows nothing about them, find themselves obliged to carry over the discussion into the very territory where, as they say, there is no rest or foothold, — into that dreamland which they declare to be peopled only by phantoms. Unwittingly and in spite of themselves, they talk Metaphysics; they are compelled to preach the very doctrine and method which they disavow. Huxley attempts to build upon Descartes and Berkeley; Herbert Spencer and Tyndall draw their weapons from the armory of Hamilton and Hume.

I prefer, however, to follow the direct argument, and to show specifically, and in each case, that the denial of first principles, which is the distinctive feature of Positivism, is suicidal, since it takes away the groundwork even of physical inquiry, and reduces empirical science itself to a series of baseless assumptions.

The first principle, the necessary *a priori* assumption, upon which all chemistry depends, is the axiom, which is at least as old as Leucippus and Democritus, that matter is both ingenerable and indestructible. *Nihil gignitur, nihil interit;* not an atom of matter is ever created or destroyed. This maxim certainly is not given to us by experience, for, without it, experience is meaningless, and would teach us nothing. A compound substance cannot be resolved into its elements, or reconstituted from those elements, if we do not arbitrarily assume, in the first place, that, at the moment of analysis or synthesis, not a particle of one or the other substance is either created or annihilated. The water vanishes, hydrogen and oxygen appear; or *vice versa*. What is the chemist's ground of assurance here, that the same substance persists or endures, only its outward properties or attributes, its manifestations to sense, being changed? Is it because the total weight remains the same after the experiment? But that proves nothing, except that, for each atom or molecule destroyed, a new one, its precise equivalent in weight, is created. Besides, why infer identity from the one attribute, weight, which persists in amount, rather than infer difference from all the other properties — volume, color, texture, consistency, chemical affinities, etc., — which undergo great change? And what is this necessary axiom, this first principle *a priori* of physical science, but the perdurability of material substance, — the fact that any change or transformation, however great, affects only the accidents, the outward properties of things, while underneath these attributes, and so imperceptible to sense and inscrutable by analysis, there lies something which is permanent, which knows no change, and which really constitutes the inmost essence and actual being of all material things; — what, I ask, is this first principle except that very metaphysical entity, pure *Substance*, which the Positivists attempt to ignore and banish, on the ground that "Science" knows nothing of it? So far as this is true, so much the worse for "Science," who here pulls her own house down.

Lavoisier, the French chemist, as quoted by Mr. Huxley, tells us: "We may lay it down as an incontestable axiom, that in all the operations of art and nature, nothing is created; an equal quantity of matter exists before and after the experiment; the

quality and quantity of the elements remain precisely the same, and nothing takes place beyond changes and modifications in the combinations of these elements. Upon this principle the whole art of performing chemical experiments depends; we must always suppose an exact equality between the elements of the body examined and those of the product of its analyses."

The indestructibility of matter is here correctly held by Lavoisier to be the condition, or indispensable prerequisite, for performing any experiment, or rather for proving anything by experiment. But Mr. Herbert Spencer, with astounding false logic, is compelled by his Positivist theory to maintain that this indestructibility was first proved by experiment. "So far from being admitted as a self-evident truth," he says, "this [proposition that matter is indestructible] would, in primitive times, have been rejected as a self-evident error." "Nor, indeed," he adds, "have dark ages and inferior minds alone betrayed this belief." "The gradual accumulation of experiences, however, and still more the organization of experiences," that is, we suppose, the progress of Science, "has tended slowly to reverse this conviction;" and "we have learnt that, relatively to our consciousness, Matter never either comes into existence or ceases to exist." *First Principles*, chap. iv.

Take another example. What are called "the Laws of Nature" are only generalizations from experience; and experience has no validity as a ground of proof, if we do not first assume the veracity of Memory. This, indeed, is the significance of the word; experience means nothing but an aggregate of remembered facts. But what is our ground of assurance that Memory is trustworthy; that is, that the facts are rightly remembered, or even that they are remembered at all, and not rather imagined under an illusive semblance of Memory? It is the conviction, or the *a priori* intuition, — call it what you please, — that I, the person now remembering the facts in question, am the same person who actually witnessed those facts at the time of their occurrence, say, yesterday, or a week ago. The only possible reason for asserting that the fact as remembered is one that actually happened, is the absolute identity of what may be called my *past self*, witnessing the event, with my *present self*, now bearing testimony to its occurrence. The evidence of the person now remembering is available only under the supposition that he is one and the same person with him who saw or heard, at a given previous time, that to which he now testifies. But Hume, Herbert Spencer, and other Positivists affirm that "Science" knows nothing of the identity, or even

of the existence, of any such being as Self, considered apart from the distinct and successive states of consciousness. What others call Mind or Self is, according to them, only a series of *successive* sensations and ideas, existing only one at a time, Consciousness at any one moment evidencing the existence only of the one sensation or idea then and there present to it, but which immediately passes away and gives place to another. To change the figure, they hold that Self is a string of beads from which the string has been removed, so that there is no longer any connection between them, the beads constantly slipping through the thinker's fingers, since he grasps only one of them at a time, and that but for a moment. Neither past nor future is in any way present to consciousness. "They are the successive perceptions only," says Hume, "which constitute the mind." But if Self, the conscious thinking being, be not present, so to speak, all along the line, if he be not the permanent spectator of the ever changing phenomena, the persistent, identical *substance* underlying and witnessing the ever fleeting states, then memory is a mere illusion, and the past is but a dream, which affords no ground whatever for anticipating the future. Experience is only a cheat. Then what becomes of the boasted fixity and universality of Physical Law, which is only a projection of the past into the future? I say, therefore, that the continuous existence and identity of the thinking Substance is a condition or prerequisite of memory, without which experience is impossible.

The truth is, the Empiricists or Positivists here commit, in an aggravated form, the very fault which they charge upon their opponents, — the fault, namely, of dealing with pure abstractions, mere figments of the brain, as if they were realities, real entities. Except as pure abstractions, entirely divorced from reality, there is no such thing as Thought without a Thinker, Perception without a Percipient, Sensation without a Sentient, Action without an Agent, Jumping without a Jumper. Here, I am not going behind experience to first principles, or digging up hyperphysical realities under observed facts. I am not going *behind* or *under* observation at all, but am only pointing out what we observe, whether as a reality or a mere phenomenon, it matters not. What we actually observe, by way of sense, is not the abstraction, *motion*, but the concrete fact, a particular moving thing or object; what we are actually conscious of is not the pure abstraction, *hunger*, but the concrete fact, I am now hungry. Precisely this is the meaning of the famous Cartesian argument. Descartes does not say, *Cogitatio, ergo res cogitans est;* that would be to start from an abstraction,

and to proceed by reasoning. Whereas he directly affirms, as a particular fact of observation, *Cogito, scilicet sum.* This is not an inference; Descartes and his followers all agree that it is not. It is only making the statement of a fact explicit.

As a third example, to show that all empirical or Positive science must rest upon a metaphysical basis, that is, upon the assumption of first principles not evident to sense, and yet more unquestionable than any sensible fact, take the necessary postulate of all inductive science. What is the ultimate ground of Induction? Not experience, I say, but something which transcends all experience. Induction is that process of thought by which we infer the unknown from more or less similar cases which are known; that is, we arbitrarily extend the principle or law, from phenomena already observed and analyzed, to other phenomena of which, as yet, we have no experience whatever. What authorizes us to do so? What causes such a procedure even to appear legitimate? Certainly not experience, for the question is expressly limited to cases of which we have no experience. Induction assumes to make known *the future*, to declare what will be the result of future observation and experiment; and it is a contradiction in terms to say that we have had experience of the future. Granted, say the Positivists; but, they argue, we *have* had experience of what *was* future; we have already tried Induction in numberless cases, and its results have been verified by subsequent experience. This subsequent verification, they say, makes up for and cancels the original illegitimacy of the process. *Does it?* I maintain, on the contrary, that this answer is grossly illogical, and does not even touch the point at issue; and I am sorry to say that the fallacy in it is not only countenanced, but expressly adopted, and made the corner-stone of his whole philosophy, by so eminent a thinker as Mr. John S. Mill. It is a gross *petitio principii.* What merely "*was* future" has already, by hypothesis, ceased to be future, and become the past; therefore, in reasoning from it, we are still reasoning from the past to the future, from that of which we have, to that of which we have not, experience; the very process whose legitimacy is in question. Mr. Mill, and all the Positivists along with him, actually brings an induction to prove the validity of the inductive process. Why *will* taking opium put one to sleep? Because it always *has* put people to sleep. But what proves that the induction in this case *will be* verified by subsequent experience? Because induction in numberless other cases *has been* verified by experience. Am I not reasoning from the past to the future, from

the known to the unknown, just as much in thus proving induction to be valid, as in proving opium to be soporific?

To make this point still clearer, I borrow an illustration in part from Dr. Campbell. Let us suppose our whole time divided into five equal portions, A, B, C, D, E, the first four of which have been experienced, and found to be similar to each other, while the last, E, is still in the future. Now how must I argue with regard to this last? Shall I say, "B was like A, C was like B, D was like C; therefore E, of which, by hypothesis, I as yet know nothing, will be like D?" This would be strange logic; for E, the minor term, the subject of the conclusion, does not appear at all in the premises. Is the reasoning made more legitimate, then, by supposing, as the Positivists do, that the induction in this case, and in numberless other cases, was originally made antecedently to experience; but that in each instance it was verified by subsequent experience? Let us see. We have only to suppose a few more cases, F, G, M, N. Now, our reasoning runs thus: "We were first led to believe, on inductive principles, that E would be like D; and this induction was verified by subsequent experience. In a similar way, the several inductions that F would resemble E, and G be like F, and M would be like G, were each and all verified by later experience." Shall we then argue that the induction about N, which is still future, will also be verified by later experience? But this is empirical logic again; for N, the minor term, does not appear at all in the premises. And the same difficulty recurs, if, instead of four, we suppose four million, previous cases. Turn the matter as we may, the principle which is the ground of induction is a law of thought, and not a law of things, — not an educt from experience. It teaches what an original and innate law of our mental constitution obliges us to expect, but says nothing about what must, or must not, actually happen.

When the mathematician applies the Doctrine of Chances, his calculations are based upon this innate principle, this fundamental law of human belief. The calculated probability is subjective, and not objective. The computer does not even assume to increase our quantity of information, or to reveal any new data on which our judgment ought to be based; but only how we ought to judge and to act on the data already in our possession. We are not even assured that the calculated result will be verified at the first trial, or at any subsequent trial; the computation only shows us how we ought to expect the actual results to be distributed in the course of an infinite number of trials. We see

that this must be so, because the theory does not concern *future* events only, the occurrence of which is still contingent, but may be applied also to the *past*, to determine whether we ought to believe that the event did, or did not, take place. In such case, the application of the theory cannot affect the event itself, which is already irrevocably determined either one way or the other; but it only assumes to guide our judgment in determining how much our opinion ought to incline either to the positive or negative side as to its occurrence. To adopt an illustration familiar to experts in this department, all nature may be compared to an immense urn containing a countless number of balls, about the qualities of any one of which, antecedently to experience, we know nothing. Man has the privilege only of drawing out one of these balls at a time, and after determining its color, of returning it to its place in the urn. Suppose ten millions, or any larger number, of such trials to be made, and each time, as the invariable result, a white ball to be drawn. The induction here is very complete; but does it prove that a white ball *must* be drawn at the very next trial? Certainly not. It is *just as possible* that the next trial will produce a black ball as a white one; and Nature or Providence — use which name you choose, — may have so determined, at the outset, the relative numbers of whites and blacks, that, if we knew those numbers, and calculated the chances, the drawing of a black ball would be precisely what we ought to have expected. Let the Empiricists talk as they may about the universality and the certainty of Physical Law; if they mean thereby that such Law necessarily will hold good one moment beyond the present time, or necessarily has held good, in the past, in a single instance beyond those cases which have actually been observed, I scoff at their assertion; not at their evidence, for they have none.

Another dictum of the Positivists, that which concerns Final Cause, deserves examination, as it illustrates so clearly two of the unfounded assumptions which underlie and pervade their whole philosophy: first, that a fact incapable, from its very nature, of being verified by the testimony of the senses, cannot be established by any other sort of evidence; secondly, that our mere ignorance whether a thing does, or does not, exist can be legitimately converted into a categorical *denial* of its existence, and, as such, may then be made an axiomatic principle, to restrict the conclusions to which later inquiry might otherwise lead.

Thus, we are often reminded nowadays of the doctrine, which is at least as old as Lucretius, that Science knows nothing about any

supposed *purposes* for which different organs were made. Science tells us that such organs exist, and that we can learn only *how* they exist, what is their structure, and what functions they perform. An organ is characterized by its formation, we are told, as this compels it to subserve one function rather than another. All that Science teaches us is, that an animal follows the mode of life which its organs constrain it to follow.

Now, if our senses are our only guide, this is perfectly correct doctrine; for these facts only are evident to sense, and the "Science," which is here in question, accepts no data which have not the testimony of the senses. We needed not the authority of eminent physiologists, however, to establish this limitation of scientific inquiry; since everybody knows at once that purpose, or Final Cause, is a phenomenon of mind, not of matter, and as such, from its very nature, cannot be subject to sense, but is witnessed solely by consciousness. Material phenomena, outward acts, may indeed afford signs or indications, from which we may infer, with more or less confidence, that they were purposed or intentional; but the thing signified, the governing purpose, is not manifest to sense.

Observe, moreover, how soon this innocent avowal that "Science" is unable to testify to the *presence* of design passes over into the vastly broader, but wholly illegitimate, affirmation, that there is no end or purpose discoverable by the human intellect, in whatever way the search for it may be prosecuted. Confessedly incompetent to observe the *presence* of a mental phenomenon, how is Science authorized to affirm its *absence* — that it does not exist in any case whatsoever? This is much like attempting to sound the Atlantic with a ten-foot pole, and declaring the result of numerous experiments thus made to be, that the ocean is bottomless. Decandolle says, "birds fly because they have wings; but a true naturalist will never say, that birds have wings *in order that* they may fly." The functions are a result, and not an end or purpose. Lucretius affirmed the same thing long ago.

> "Nil . . . . natum est in corpore, ut uti
> Possemus; sed, quod natum est, id procreat usum."

Who told them so? What right have Geoffroy St. Hilaire, or Decandolle, as mere naturalists, to have any opinion on the subject? Who consulted them at creation, or informed them afterwards, that the eye was not made in order that the animal provided with it might see, but that it was formed by a hap-hazard

tentative process, which, after innumerable purposeless variations, happened at last to produce a form favorable to sight, — pretty much as he who shoots entirely at random, and with his eyes shut, may at last, merely by accident, hit the bull's eye, if he has patience to try long enough?

Mr. Huxley speaks of "the fruitless search after final causes;" and censures "those hardy teleologists, who are ready to break through all the laws of physics in chase of their favorite will-o'-the-wisp." He therefore agrees with Mr. Mill, who, in the passage already cited, declares that final causes "are unknown and inscrutable to us."

Surely this is a humiliating confession to be made by the Positivists, that their Science knows not, and never can know, a fact which is still patent to the consciousness of every human being, at every hour of his waking and conscious existence. Every sane person is perfectly aware that, with a few insignificant exceptions due to mere caprice or weariness, he never acts, either on great or slight occasions, he never takes a single step, without a purpose, distinctly recognized by him, of thereby attaining some desired end, or reaching some wished-for place. Any one would even reject as a serious affront an insinuation that he often acted idly, or without a purpose. It argues no presumption or discourtesy to affirm, that neither Mr. Huxley nor Mr. Darwin ever wrote a sentence in one of his published works, or ever made a scientific observation or experiment, except with a full and conscious intention, which is always successfully carried out, of thereby instructing and entertaining his readers, or of increasing the stores of Science.

Not only, then, are we perpetually conscious of the final causes of *our own* actions, but it cannot be maintained for a moment, that we are not sure that any other persons act in the same manner, though we actually see only what they do, and never what they purpose. Practically we are just as firmly convinced that other men act with definite purposes, as that we ourselves so act. Then it is legitimate, it is even a strictly scientific, mode of reasoning, from mere external phenomena, from books and apparatus, and scientific collections and discourses, which we can see or hear, to infer the final causes of them, which we cannot see or hear. Accordingly, we have a right to believe that Mr. Mill and Mr. Huxley did not *intend* to assert that men never act from design, but only that no other mind in the universe, except that of man, and perhaps of the lower animals, ever acts with a purpose. They simply meant to say, for example, that the structure of a telescope

does, but that of the human eye does not, afford good scientific evidence of design.

Here issue is joined. This is the question, and this is the whole question. It need not be theological; it does not necessarily concern the being of a God. The purpose, which we believe to be abundantly indicated in external nature, is not necessarily divine, the purpose of an infinite, omniscient, and all-perfect Being. We do not need to prove that the contrivance is perfect; for, in truth, even the human eye is not a perfect organ of vision, nor the human hand a perfect means of grasping objects and providing for our physical wants. But the question is, whether there is *any* contrivance, any indication of a purpose, any good evidence of the presence of *mind* in the universe other than the mind of man, even though that other mind, so far as we can see, be put forth only to a finite and limited extent, or in an imperfect manner. It may even be an unconscious mind, an inferior agent of a higher power, working unwittingly, like the instinct of animals, towards a purpose of which it is not distinctly aware.

This was the supposition of Dr. Cudworth, in his hypothesis of a Plastic Nature. This is also the doctrine, maintained on purely physical grounds, by Mr. J. J. Murphy, in his able and scientific work on "Habit and Intelligence." It is stoutly advocated, moreover, exclusively on the principles of inductive reasoning and from the evidence of sensible facts, by Von Hartmann, who does not believe in the existence of a God. This German philosopher enumerates no less than thirteen peculiar arrangements in the structure of the human eye, all of which are requisite to keep up the power of distinct vision; and he calculates mathematically, on the doctrine of chances, the probability of these thirteen being united by the operation of physical laws alone, without the intervention anywhere of a mental or final cause. Assuming the probability that each one of these arrangements, taken separately, might be developed from the material conditions of embryonic life, to be as high on the average as .9, — "a probability which very little even of our most trustworthy knowledge possesses," — still the probability that all these conditions united are so produced is only $.9^{13} = .254$. Hence the probability that a mental or Final Cause must be assumed, to satisfy all these conditions taken together, equals .746, or nearly three fourths; that is, the odds are three to one in favor of a Final Cause. But in truth, the probability of each arrangement taken singly does not exceed .25, or at most, .5; and the resulting decimal for the union of the whole thirteen is then,

in the one case, .9999985, and in the other, .99988, which is virtual certainty. Hence, the dogmatic *a priori* assumption of the followers of Hume and Comte, that "final causes are unknown and inscrutable to us," so that even the search after them is fruitless, a mere chase of a "favorite will-o'-the-wisp," appears eminently unscientific and illogical.

Moreover, the Positivist fails to see that, by prohibiting the study of final causes, he destroys the only means of supporting his vehement denial of the freedom of the human will. The Necessitarian doctrine rests almost exclusively upon the assumption, that every volition whatsoever is inevitably determined to be what it is through the action of motives upon the character of the agent. We cannot act, it is said, without a motive; and, the motives being the same, the corresponding actions could not be different from what they are. Now, what are these "motives?" Are they not the *purposes* for which we act, the results which we *intend* to accomplish, the objects which we have in view? Hence, if man does not act from design, intending to gratify the strongest motive, it must be that his will is free, since no other restraint upon it is even conceivable.

Before proceeding to the other half of the Positivist doctrine, it will be well to point out that distinction between Efficient and Final Causes, which is clearly stated both by Aristotle and Kant. In the case of production by an Efficient Cause, the parts precede the whole; the movement of a point, for instance, generates successively the several portions of a line, before it completes the line. But in the case of production as directed by a Final Cause, the conception of the whole must precede that of the parts. The inventor, for example, cannot fashion the parts of a machine, before he clearly conceives how they will work when put together so as to constitute the whole. As Aristotle says, the whole must necessarily be earlier than the part; for if the whole be broken up, the foot will no longer properly be a foot, nor the hand a hand, except in name, as when we speak of an iron hand. The Efficient Cause, therefore, creates the whole from the parts; the Final Cause produces the parts from the whole. For the whole thing is itself the purpose or end in view, and, therefore, the conception of it must determine *a priori* every part which is to be contained in it, as necessary for its construction. This is so even in a machine, which is a work of human art. But in one of nature's organisms, this correlation of all the parts with each other, and of each and all of them with the whole, is far more perfect and exact. Here, not only does

each part exist only *through* all the others, and *for the sake of* the others and the whole, as their Effect, and as the purpose to be accomplished by them, but each one is a Cause and an organ for producing those others and the whole. In this respect, a living body infinitely surpasses any machine of man's device; for it is not only an organized, but a *self-organizing*, contrivance. In a clock, for instance, each wheel is *a means* of moving all the other wheels, but not *a cause* producing the wheels which it moves; and still less is one clock a cause producing other clocks, through selecting fit material and organizing it for clock-purposes. A mere machine has only a moving power. But an organized living thing has also a plastic or formative power; it fashions and animates the very parts by which it is itself built up and maintained in being. Nay, more; not merely is it self-creating and self-maintaining, but it propagates and continues the race or species to which it belongs. Therefore, argues Kant, an organized being cannot be explained as mere mechanism, or as the result simply of a moving force.

Though it would be a great stretch of imagination, and one which certainly will never be realized in fact, we may perhaps suppose a clock to be so ingeniously fashioned, that it should be a means of multiplying itself, that is, of producing other clocks. But we cannot imagine one to be so contrived as to be self-formed, — both self-producing and self-sustaining, — at once building up its own parts, and built up by them, — digesting and fashioning its own materials, and so putting them together as to constitute itself as one whole. Yet this is precisely what is done by every living organism, in its process of what is called "self-development" from a minute and seemingly structureless germ up to its adult state. Mere mechanism, as a means of carrying out a process thus intricate and self-involved, is utterly inconceivable; and the Positivist who dreams of it as an agency adequate to produce such results, is either incapable of thinking clearly, or manifests illimitable credulity.

The remaining portion of the Positivist doctrine, that Efficient Causes also are "unknown and inscrutable to us," is as indefensible as the portion which precedes it; but it opens so broad a field for discussion that it cannot be fully considered here. Enough may be briefly said, however, to refute the assertion. Here, again, the latent fallacy is the implied assumption, that what mere Physical Science cannot make known is thereby forever excluded from the domain of human knowledge. Efficient causes, we admit, are not patent to the senses. Nobody ever has discovered, in the external

universe, merely by observation through the senses, the *nexus* which so binds two events together, that the production of one of them *must* be followed by the occurrence of the other; and no competent observer nowadays even dreams that such a discovery, so made, will ever be possible. Sense takes cognizance only of the events themselves, and of their sequences in time; it cannot even testify that these sequences are absolutely invariable, but only that they have been found invariable so far as experience has extended. And experience must always come immeasurably short of the infinite wealth of things. But while the Empiricist thus loudly proclaims his nescience, his inability *to find* an Efficient Cause, I believe he never really doubted, in his secret and instinctive thought, that such a cause exists, — never even doubted that no event whatever, no change in the outward universe, ever did take place, or ever can take place, without just such a Cause. Tell even a young child, that the chair has just fallen down, or the pane of glass has been broken, without a Cause, understanding thereby a true Efficient Cause, and, if he knows the meaning of your words, he will either laugh in your face, or think that you are making game of him. And this childish but irresistible conviction, not founded on experience, but antedating all experience, can never be thoroughly eradicated from the mind of the grown man by any alleged science or nescience. And it is just this primitive conviction, though covered up and perverted by false theory and a wrong use of language, which enables the Empiricist to declare, as he does, with absolute certitude, that nothing *can* take place except in strict accordance with Physical Law. Mere experience knows nothing of what *can be;* it knows only what *is*, and what *has been.*

Even if mere experience could determine the sequence in time of any two events to be absolutely invariable, (which it cannot do,) it is very easy to show that such "inseparable concomitancy" is not what either the man of Science, or the vulgar, mean by "efficient causation." If A is known only as the invariable antecedent of B, then A is only a sign or herald, which *leads us to expect* that B will happen; as, for instance, just before the spring equinox, the clock striking six in the morning is the event which leads us to expect immediate sunrise. This is only the *causa cognoscendi*, or the reason *why I know* that something will happen. But it certainly is not the *causa fiendi*, the Efficient Cause, that which *makes* the thing happen, whether it is expected or not, and whether it happens on one occasion or another.

Now the problem exists, whether men have yet solved it or not.

This is a case in which even the vulgar know the meaning of the words employed, just as well as the philosopher does, and perhaps somewhat better, if the philosopher is a little blinded by a preconceived theory. In common with the vulgar, I know precisely what I mean, when I ask, What *makes* that phenomenon happen, or what is its Efficient Cause? even though I cannot answer the question thus asked. Then I know what Efficient Cause means; and this knowledge either came to me from experience, in which case I have actually had either external or internal experience of such a Cause, or there is some knowledge which is not empirical. Either horn of the dilemma confutes the Positivists.

I believe that this knowledge of Efficient Causation comes from internal experience. When, with a conscious exertion of my mental, and all my muscular strength, I push against the wall of the house, I *know* that I am putting forth force or power, and that such force is essentially causative, or necessarily *efficient*, even though it be not *sufficient* to produce all the effect desired, and therefore, so far as my senses testify, the wall does not in the least give way. In this case, my effort is certainly not made known to me merely as an antecedent event; for it has no consequent. No visible effect follows; the wall still stands. And yet I know that this effort was essentially an Efficient Cause, and, therefore, that it *must* have been followed by *some* effect, must have *tended* to make the wall give way, even though this effect was imperceptible to sense.

How this first knowledge, this earliest idea, of Efficient Causation subsequently passes over into an irresistible conviction of the Law of Causality, that is, into an absolute and imperative belief, that no change whatever *can* take place in the external universe without an efficient cause, is a question which need not detain us here. Probably it could not be fully answered without setting forth a complete system of metaphysics. As we have seen, it is the question which first suggested Kant's whole "Critique of Pure Reason."

The Positivists fail to see, what now appears obvious enough, that their doctrine of nescience so narrows the domain and restricts the processes of Physical Science itself, as to incapacitate it for the exercise of its functions, and to discredit as illegitimate many of its conclusions hitherto supposed to be irrefragable. According to their logic, our investigations must be strictly limited to phenomena attested by the evidence of the senses, and to what Mr. J. S Mill calls "the strictly legitimate operation of inferring, from an

observed effect, the existence, in time past, of a cause similar to that by which we know it to be produced in all cases in which we have had actual experience of its origin." But if this is a correct statement of the logic of inductive science, the undulatory theory of light must be abandoned as a baseless and untenable hypothesis. For the ether, the vibrations of which are needed for the transmission of the light to our eyes, and which is supposed to be widely diffused through space, extending at least as far beyond the remotest visible star as the distance between that star and our earth, is not only absolutely imperceptible to sense, but is wholly unlike any other substance with which we are acquainted. It is not merely invisible and intangible; but, so far as is yet known, it has not inertia enough to retard in the slightest degree the motion of the lightest body passing through it. According to the latest form of the atomic theory, its molecules do not attract, but mutually repel, each other; and its vibrations are transmitted without stay or hindrance through the densest transparent bodies. What is this ether? It must be something; for there cannot be vibrations where there is nothing to vibrate. It cannot be material; for it does not gravitate, it has no inertia, and it does not, so far as we know, exclude matter from the space occupied by itself. It cannot be mind; for it is extended, and it affords not the slightest trace of perception or consciousness. Then it must be a *tertium quid*, something between matter and mind; and as such, it is quite as incognizable and inconceivable as the Infinite and the Absolute. Its existence is inferred solely from its effects, and from analogy with the air and other vibrating substances which are the vehicle of sound; — an analogy fainter and more remote than that between the human and the Divine Mind. Let the Positivist prove to us, on his own principles, if he can, that we may legitimately assume the existence of this ether, and still deny the being of a God.

Another specimen of the logic of the Positivists may be taken from their attempts to base the conclusions of a crass materialism upon the assumed identity of certain chemical changes, which are *supposed* to take place in the substance of the nerves, with the states of consciousness which are so far attendant upon them as to be manifested at the same moment. I have already quoted Mr. Herbert Spencer's assertion, that these two classes of phenomena are nothing but "the inner and outer faces of the same change;" and consequently, that in truth there are not *two* classes of them, but only one, since these changes, if viewed "on their outsides," appear as chemical phenomena, but if we regard them "from their

insides," they are phenomena of consciousness. What evidence is there of the truth of this assertion? On what ground does he maintain the *identity* of two classes of phenomena which are so radically unlike that they have not a single feature in common? The one class can be viewed only through the external senses, under the microscope or in the test-tubes of the chemist, and can be expressed only as physical changes, in terms of extension and motion; consciousness as such knows nothing of them. The other class are absolutely imperceptible to sense, are not extended, do not move, have no relation to space, so that it is sheer nonsense to talk of their "insides" or "outsides," and can be cognized only as *successive* states of the indivisible and identical Ego of consciousness. What trace of similarity can be pointed out between conscious Thought on the one hand, and the tumbling down and building up of molecules from their primary atoms in the brain on the other? Dissimilar in every respect, it is hard to believe that the assertion of their *identity* is made in sober earnest.

For the question here at issue, the concomitance of the two phenomena proves nothing. The fact that a certain physical event is the antecedent, and a certain mental state is its invariable consequent, may prove that the former is the (physical) *cause* of the latter; but it certainly does not prove the *identity* of the one with the other. Nay, by denominating one the antecedent, and the other the consequent, it expressly negatives the supposition of their identity. Nobody doubts that a vibration of the air or some other medium, is the invariable antecedent of the sensation of sound; but any one would very properly be laughed at who should seriously maintain, that the quivering motion of the air *is* the sensation. Then bring the two phenomena one step nearer to each other. Assume, as Mr. Spencer and other materialists do without a scintilla of evidence, that certain molecular changes in the substance of the nerves always precede or accompany any change in consciousness. Still, the assertion that such molecular disturbance *is* the conscious thought which it accompanies, is quite as absurd as the former one, that the quivering motion *is* the sensation. The two things are entirely incongruous; you might as well say that a dance of atoms is an epic poem.

But the argument may be carried much farther. The great simplicity and uniformity of molecular action in any substance, and of all other merely physical change, are wholly incompatible with the infinite range and diversity of human thought. All physical change is resolvable exclusively into modes of motion. Fast or

slow, continuous or reciprocating, minute or grand, in one direction or another, weak or strong, it is still motion, and nothing but motion. The very molecular action, which Mr. Spencer here refers to, is only a process constantly repeated of setting up bricks, and knocking them down again. It is a mere dance of atoms, and one which has by no means an intricate figure or any considerable variety of steps. It is as plain as a pikestaff; "up and down the middle, cross hands, and swing your partners." These are the phenomena, and all the phenomena, as viewed "on their outsides"; and the very same phenomena, Mr. Spencer tells us, regarded "from their insides," are John Milton composing the "Paradise Lost," and Isaac Newton meditating his immortal "Principia." Should we even grant to the materialist, then, what cannot be admitted for a moment, that his theory sufficiently accounts for that vague abstraction, that ghost of a reality, which we call *thought in general*, it certainly does not afford any explanation whatever of the only phenomena really needing explanation; namely, the infinite compass and diversity of the *particular thoughts* which actually succeed each other in the consciousness of any one thinker. I fail to imagine how any dance of atoms in the materialist's brain, when "viewed from the inside," should be so illogical as to suppose that "thought in general," which is one and the same in all brains, and under all circumstances, is still identical with "particular thought," which is never the same in any two minds, or in any one mind at two successive moments.

CHAPTER XVI.

Schopenhauer's Fourfold Root of the Principle of Sufficient Reason. The Freedom of the Will.

In the preceding chapter, and elsewhere, we have briefly looked at the great question respecting the Freedom of the Will in a few of its aspects, reserving a complete discussion of the subject for a later opportunity, which has now arrived. As a means of facilitating a separate and thorough examination of this problem, I will present here a compendious view of Schopenhauer's doctrine respecting it, as contained in his earliest publication, entitled "The Fourfold Root of the Principle of Sufficient Reason." This little book, one of the ablest and most original, as it seems to me, of all his works, was the Thesis which he presented when he took his Doctor's degree, in 1813, at the age of twenty-six years. Many of the conclusions which it seeks to establish appear unfounded, and the reasoning in support of them is sophistical; but they are worked out with great acuteness and ingenuity, and were afterwards made the basis of that system of philosophy, the exposition and defence of which occupied the remainder of his life. The character of this philosophy, and of its author, will be considered at length in a subsequent portion of this book. Here, we have only to examine his masterly analysis of the great Principle first enunciated by Leibnitz as the foundation of all science and all philosophy.

The broadest and most universal expression of the Principle of Sufficient Reason is, that no phenomenon can exist or take place, and no assertion can be valid, without a Sufficient Reason why it is so rather than otherwise. The enunciation of it may be made more clear and precise thus: In the phenomenal world, that is, in the universe as it appears to us, every object and every event, including even every judgment, volition, and affection of the mind, is determined, or made what it is, through the relations in which it stands to other phenomena; so that, if we knew those relations thoroughly, we could determine *a priori* the existence and the

character of the phenomenal object or event, the latter being apprehended as the Consequent, and the determinative nature of these relations as its ground or Reason. This supreme or ultimate principle of all phenomenal existence is expanded by Logic into these two fundamental laws: If you affirm the Reason, you must also affirm the Consequent, as inevitably going along with it; and if you deny the Consequent, you must also deny the Reason. But from denying the Reason, or from affirming the Consequent, no conclusion follows; because the Consequent may follow from some other Reason than the one in question.

The principle of Sufficient Reason may further be regarded as an expression of the truth, that, in the universe as it appears to us, no phenomenon whatever is isolated or independent; not only, through the universality of the laws of Space and Time, does it stand in necessary relations of coexistence and succession with other phenomena, but it is also necessarily apprehended as determining, and determined by, some of these relations. All objects and events, regarded either as coexisting at one time, or as succeeding each other throughout all time, and so conceived as occupying immensity and eternity, are thus, to our apprehension at least, firmly bound together as one whole, every part being necessarily what, where, and when it is, through its relations of mutual dependence, or reciprocity of action, with every other part. This is an *a priori* principle, as it is universally and necessarily true; it is not derived from experience, but must be presupposed before experience is possible. Thus, with regard to every phenomenon, we are both entitled to ask the question, and we are necessarily urged to ask it, Why is it so? The whole business of science is to answer this question, in which it is, of course, assumed that every thing must have a Ground or Reason for its existence, and that it is itself a Ground or Reason, on which other things must depend as its Consequent. Then the universal meaning of the Principle, — that is, of the question Why, — is, that every thing *is* by means of some other thing. Our only idea of *necessity*, says Schopenhauer, the only meaning of the word, is derived from this relation of a Ground or Reason to its Consequent. Hence, all phenomena are necessary; each must have its Ground, and this being given, the Consequent *must* follow. All other relations of phenomena with each other are contingent; they are merely accidental juxtapositions or coexistences of some with others, which, however frequently repeated, still appear casual, and do not even suggest the idea of a *necessary* union one with the other, until we begin to suspect that one is the Ground or Reason of the other.

Herein, and therefore at the outset of the discussion, I must dissent entirely from the doctrine taught by Schopenhauer. Only in the external and material universe, as it seems to me, and in demonstrative reasoning, as in pure mathematics, is the connection of Ground with Consequent a *necessary* union. In the realm of mind, on the contrary, and in all cases of merely probable reasoning, embracing most of the conclusions by which man regulates his ordinary conduct, Reasons are not strong enough to necessitate their Consequents, but the connection between them is, avowedly, only contingent or hypothetical. This connection is not equally strong in different minds, or even in the same mind at different times. The facts and arguments, which convince me now, may have no effect upon my neighbor's opinion, and may perhaps seem inconclusive to me also at another time, and under different circumstances. Schopenhauer really begs the question at the outset, against the doctrine of the Freedom of the Will, by arbitrarily limiting the meaning of the Leibnitzian axiom, so as to exclude all cases of probable reasoning, though the greater part of human life is directed by reasoning of that character. Certainly I have a Ground for my conduct, when I decline a hazardous investment of my property; but it is not a conclusive or absolute Ground, for I may hesitate long before making up my mind. But we return to the German philosopher's exposition of the subject.

In "The Fourfold Root of the Principle of Sufficient Reason," Schopenhauer analyzes this highest Principle of thought and phenomenal existence into four distinct species, to which he gives the respective names of (1) the *causa fiendi*, or the Ground of Change; (2) the *causa cognoscendi*, or the Ground of Knowledge, that is, the Reason for every affirmation; (3) the *causa essendi*, or the Ground of Being, such as the Reason for the determinate position of every point in Space and of every moment in Time; and (4) the *causa agendi*, or the Ground of Volition and Action in its subjective aspect; that is, Motivation, or determination through Motives. Several of these, as we shall hereafter see, he subdivides into inferior species.

The first of these four Roots, the *causa fiendi*, or Ground of Change, is the Principle of Causality as ordinarily understood, whereby we assume that no event in the material universe, that is, no change in the attributes of matter, is possible, except through the action of some other phenomenon, conceived as cause or force, which furnishes a Reason for such change. The *existence* of Matter does not depend upon this Principle; for its existence, accord-

ing to Schopenhauer, is merely a manifestation of the one universal force or Will, which, because it is the *Ding an sich*, being *per se*, or absolute being, does not exist *in relation* to anything else, and is therefore absolutely free, and not subject to the Principle of Sufficient Reason. But any *change* in any attribute of matter, any alteration of its state, as when, from being liquid, it becomes solid, from being up, it falls down, from being heavy, it becomes light, etc., is a mere phenomenon of sense, and as such, we know *a priori* that it is necessarily related to some other, immediately preceding, change, as its cause. I say, related to some other change *immediately preceding;* for as this change, say, the explosion of gunpowder, takes place *now*, the other change, bringing a spark near it, must have occurred immediately before, or the explosion would have taken place earlier. The fact that the existence of Matter does not require a cause, for it is unchangeable, while any alteration of its attributes must depend on some preceding change in something else, we commonly express by saying, that change never affects the substance of Matter, but only its states or conditions. Burn hydrogen in oxygen, for instance, and water is the result; but the substance and its weight remain unaltered. It did appear as oxygen and hydrogen, uncombined, aeriform, and voluminous; it now appears as water, the two gases being combined, condensed, and so made liquid. But it is still essentially the same thing, the same substance that it was before, and the chemist can easily change it back again into that former state.

We have, then, two physical laws which determine and limit the application of the Principle of Causality to inorganic matter: the first is the perdurability of Substance, and the second is the law of Inertia. According to the latter, any state or condition of a body, whether of rest or motion, must remain unchanged, and without either increase or diminution, throughout all eternity, except some Cause appears, through which that state may be modified. Both of these laws are known *a priori*, since neither of them can be either suggested or proved by experience. In like manner, says Schopenhauer, the other primitive forces of nature, or physical laws, as they are more properly termed, such as gravity, electricity, cohesion, chemical affinity, and the like, are conceived as exempt from change, as everywhere present, and as inexhaustible. They are of the nature of occult causes, or ultimate facts, and therefore they lie outside of the domain of the Principle of Sufficient Reason. The questions, why matter gravitates, why iron is attracted by the magnet, admit no answer, except by saying

that it is their nature thus to act. The action of these primitive forces is just as inexplicable as the perdurability of Substance.

Void time and space, as mere forms of the internal and external sense, exert no efficient causation, make no impression upon our bodily organs, and so are not perceptible by sense. It is only as occupied or filled by the attributes of Matter, such as impenetrability, color, etc., that they become perceptible; hence, Matter may be defined to be the perceptibility of time and space, and the link of connection which binds these two together. Time is perceived only through the changes of state and attribute which take place in time; space is perceived only through the persistence or unchangeableness of the material Substance which occupies space. Thus, Matter is conceived only as a force occupying space, capable of affecting our external senses, and susceptible, in successive moments of time, of change in its attributes, which are its manifestations to sense, but not in its Substance. This is the simplest definition which can be given of Matter *as such*, or in an inorganic state, that is, as not modified by the phenomena of life. And in regard to inorganic matter only, are we able to apply the two axioms of physical causation, namely, that action and reaction are equal, and that cause and effect are manifested in exact proportion to each other.

But Matter exists also in an organic state, in two other forms, as constituting or manifesting either Vegetable or Animal life. Living vegetable organisms, and those portions of the animal organism which have merely an unconscious and vegetative life and office, such as the functions of nutrition, assimilation, and growth, are partially withdrawn from the influence of the purely Physical Causation which reigns alone in inorganic substance, and are subject to such Stimuli as food, moisture, light, and heat. In regard to the influence of these Stimuli, the law of the equality of action and reaction is not applicable, and that of the proportionality of the effect to the cause does not hold true. Thus, a certain quantity both of food, moisture, and warmth is an essential condition of vegetable life and growth; but the growth is not increased in exact proportion to the quantity thus supplied; and if the amount furnished exceed a given limit, not only more growth does not result, but the plant dies. In like manner, animal life, which is distinguished by its capacity for sensation from merely vegetable existence, is subject to still another form of causation, that of Motives. The action of every animal, man himself included, may be controlled more or less by offering to it certain external in-

ducements. Every animal has certain primitive impulses and desires, such as the sexual passion, emulation, the love of society, the instinct of self-preservation, and the like; and most of its actions result from the felt presence or absence of the means of gratifying these desires. For reasons which will appear further on, I speak here only of what may be called the *objective* aspect of motives, or the presence of *external* inducements.

Stimulation, or the capacity of being affected by such external agencies as food and light, which is the active principle of vegetable life, occupies middle ground between the two others; that is, it constitutes the transition between Physical Causes strictly so called, or the principle of change in inorganic matter, and Motivation, which is the active principle peculiar to animal life. As a stone may be made to move by pushing or striking it, which is Causation in the narrowest sense, so plants may be made to grow by supplying them with food and heat, and the action of animals, man included, may be governed by holding out to them external inducements, as food to the hungry, and water to the thirsty animal, and the prospect of gaining wealth or fame to man himself. In this last case, Motivation is, so to speak, accompanied and interpenetrated by knowledge; that is, it acts through intelligence, and is witnessed by consciousness. A motive, in the objective sense, is something which the animal *knows* will gratify its desire; otherwise, it would not be a motive, and so would not govern its action. It avails nothing to hold out external inducements either to a stone or a plant, since neither of them is capable of *knowing* what would gratify its desires or tendencies, even if it had any such. But since Stimulation holds intermediate ground between the other two, its action is frequently united with theirs; in plants, its action is united with that of Cause strictly so called; in animals, it is united with Motivation. Thus, the upward motion of the sap in plants is partly determined by such Stimuli as heat and light, and partly by such inorganic forces, or causes in the narrowest sense, as the laws of hydraulics and the capillary action of narrow tubes. Again, certain actions in an animal's body are wholly voluntary, and so wholly produced by Motivation, while certain others, as involuntary, are produced by Stimuli, or even exclusively by inorganic force, or again, by a union of two or more of those modes of causation. Thus, the winking of the eyelids is most commonly involuntary, being stimulated by tears or bright light; but is sometimes voluntary, or governed by motives. So likewise respiration, and the act of swallowing, partly volun-

tary and partly involuntary, are the conjoint results of pure Stimuli and Motives. The circulation of the blood is due to the joint action of Stimuli and purely inorganic forces.

Because the actions of an animal, so far as they are voluntary, depend on Motivation, which is conditioned and limited by knowledge, the proper characteristic of animal life, says Schopenhauer, is intelligence. An animal may be defined as a living organism which knows. Both Physical Causes and Stimuli, before they can become grounds of action or change, must be in actual contact with the substances to be affected by them. But as knowledge is independent of the relations of space, Motivation can act from a distance. The conduct of the lower animals can be influenced, at any moment, by objects placed anywhere within the range of their senses. Indeed, leaving out the obscure phenomena of instinct, and the exceptional cases of conduct induced by habit and training, the Motivation of brutes is properly limited to what is within the range of their senses for the moment. What is merely animal lives only in and for what is present to it in time and space; the absent, whether past or future, is equivalent to the non-existent. But man's intellect has a twofold operation, and is capable not only of intuitive, but of abstract knowledge, which is not limited to what is present, and is not necessarily directed by what is nearest or most conspicuous, as an object of aversion or desire. Man is capable of weighing motives against each other; he can repress the impulse of the moment, till the voice of prudence has had time to be heard, and till he has estimated the comparative desirableness of what is distant and future. But this distinction between man and brute will be further considered, when we come to treat of the *causa agendi*, or subjective Motivation.

Observe that Schopenhauer's analysis here points directly to one conclusion, which he did not anticipate, and would not have welcomed. The doctrine that all living organisms are mere automata, so that all the movements and changes taking place in them can be explained merely on mechanical principles, is unfounded, because it leaves wholly out of view the radical distinctions now pointed out between the three forms of the *causa fiendi*. Stimuli cannot be put in the same class with Physical Causes strictly so called; for the law of proportionality between cause and effect does not hold good in respect to them. And still less can Motivation be explained as Mechanism, since it operates from any distance, and only through the intervention of knowledge.

Agreeably to what has now been said, the first of the four Roots

of the Principle of Sufficient Reason, namely, the *causa fiendi*, the Ground of Change in the condition and attributes of Matter, may be subdivided into three perfectly distinct species, as follows: —

1. Physical Causation in the narrowest sense, controlling all change in inorganic matter.

2. Stimulation, controlling the growth of plants and the exercise of all vegetative functions.

3. Objective Motivation, controlling from a distance the outward acts of animals by external inducements.

The consideration of the second Root of the Principle of Sufficient Reason carries us over from the realm of Matter to that of Mind. Every judgment or mental affirmation must have a Ground or Reason why it is made, or held to be true. This Reason, the *causa cognoscendi*, is plainly distinguishable from the *causa fiendi*, and, in a certain respect, is the opposite of it, as the relation of cause and effect is here frequently reversed from what it was in the former case. What, in the case of physical causation, was effect now becomes cause; that is, it becomes the *causa cognoscendi*, or the *reason why I know* that a physical cause has been in operation. Thus, the rise of the mercury is the *causa cognoscendi*, the reason or cause of my knowing that the heat is increased; but in respect to the *causa fiendi*, this rise of the mercury is the effect, and the increase of heat is the cause. As a material phenomenon, heat is the cause, the rise of the mercury is the effect; as a mental phenomenon, the rise of the mercury is the cause, and my knowledge of the increased heat is the effect. All this is obvious enough; and we have only to consider Schopenhauer's subdivision of the *causas cognoscendi* into four species. He designates the first of these species as *logical*, since a proposition may be affirmed to be true because it is a valid inference from another proposition previously established; the second as *empirical*, because I may know from experience, that is, through perception by sense, that iron is hard, the sky is blue, and the like; the third as *transcendental*, because the very nature of the human mind, its *a priori* laws or innate principles, preceding and transcending all experience, assure me that space is indestructible and infinite, and that time flows on in a perfectly uniform lapse forever; and the fourth as *metalogical*, consisting solely of the three fundamental axioms of pure Thought, those of Identity, Non-Contradiction, and Excluded Middle, on which all legitimate thinking depends.

Schopenhauer is entitled to the credit of being the first to point out the third Root of the Principle of Sufficient Reason, and to

enumerate the characteristics, hitherto unnoticed, by which it is distinguished from both the first and the second. The cases thus far mentioned are not all those in which we are entitled to ask, Why is it so? that is, to demand a Reason. If asked, why the three sides of this triangle are equal, the answer is, because the three angles are equal. Is this the assignment of an ordinary Physical Cause, or *causa fiendi*? By no means; for in this case, there is no *change*, no beginning to be, and therefore we do not seek for any *force*, the application of which has had efficacy to produce a change. Neither is it a *causa cognoscendi;* for the equality of the angles is not merely a Reason why we know the equality of the sides, but whether we know it or not, the equality of the former *necessitates* the equality of the latter. These two things, these two determinations of existence, must have gone together forever, though there were no mind in the universe to cognize their union. The being of one involves and necessitates the being of the other. This third Root of the Principle is appropriately denominated by Schopenhauer the *causa essendi*, the Ground or Reason of Being. It determines the relations to each other of all Numbers, that is, of all succession in time, and of all Positions in space; and therefore is the foundation of arithmetic and geometry, that is, of all pure mathematics. Three is one half of six, and the square root of nine, on account of the respective relations of three, six, and nine, to unity, which is the foundation of number, as it is the starting point for determining succession in time. In like manner, every position in space is inevitably determined to be where it is, through its coexistent relations with at least three other points in space, not in the same plane. There is a Ground or Reason, therefore, for every truth in pure mathematics; and it is neither the *causa fiendi*, why it became so, for it never did become, but always was so; nor the *causa cognoscendi*, for it determines not merely our knowledge of the fact, but the very being of the fact, and is consequently named the *causa essendi*.

Schopenhauer maintains that the fourth Root of the Principle is found in Motivation as viewed in its subjective aspect, that is, in the relations of volition to the desire, passion, or motive, by which it is inevitably determined to be what it is. Of course, he is a strict Necessitarian. As under the third subdivision of the first Root, Motivation in its objective aspect, he held the outward conduct of all animals, man himself included, to be irresistibly determined by external inducements, so in this fourth Root, he considers the phenomenal manifestations of will, that is, particular

volitions, to be just as necessarily determined by the prevailing motive as any physical event is by its efficient cause. Given the predominant desire of the moment, he says, and the volition must be what it is, and must instantly follow; otherwise, there would be a phenomenon without any sufficient Ground or Reason.

This whole analysis is summarily presented in the following scheme.

Principle of Sufficient Reason.

1. *Causa fiendi.*	1. Principle of Causality	Change.
	2. Principle of Stimulation . . .	Growth.
	3. Principle of Motivation (objective)	Outward act.
2. *Causa cognoscendi.*	1. Logical	Inference.
	2. Empirical	Experience through the senses.
	3. Transcendental (synthetic)	*A priori* truths.
	4. Metalogical (analytic) . .	Three axioms of thought.
3. *Causa essendi.*	1. In Time	Number.
	2. In Space	Position.
4. *Causa agendi.*	Motivation (subjective) .	Volition.

But while all phenomena, including all manifestations of Will, whether as volitions or as outward acts, are thus inevitably determined or necessitated, each by its own particular Ground or Reason, both Kant and Schopenhauer maintain that the Will in itself, or the Intelligible Character, as it is not a phenomenon, but is being *per se*, or *absolute* being, is not so determined; it has no Ground or Reason, and is therefore absolutely free. Space and time, as we have learned from Kant, are only laws or forms of phenomenal being, that is, of what appears; never of the *ding an sich*, or being as it really is. This, as existent out of space and time, has no plurality, but is absolutely one, so that there is nothing else which can act upon or determine it. As having no duration in time, it is not subject to change, and therefore has no *causa fiendi*. As incognizable, because the intellect can know only phenomena or what appears, the *causa cognoscendi* does not enter into the case. As absolute, it is out of relation to any thing, even to any point of space or to any moment of time; and is, therefore, free from the *causa essendi*. And as to Motivation, or the *causa agendi*, that, as we have seen, affects only the particular volition, or the concrete act, — never the inborn character, or inmost nature of man and of all things. This is the essence of the universe; the ultimate Ground or Reason of all that appears; the one primal force, which is wholly indeterminate and free, because it only acts, and is never acted upon. Just as change affects only the attributes or properties of anything, but leaves its incognizable *substance* un-

altered and unalterable, the same yesterday, to-day, and forever, so Motivation determines only the volitions and outward acts which are the manifestations of that essential character which is born with us, and makes us what we are;—nay, which makes the universe what it is.

Thus, again, as already remarked, having successfully traced any phenomenal action or change in matter up to one of the primitive forces in nature, that is, up to an ultimate physical law, say, to gravity or to heat, we never inquire farther, or ask "Why does gravity or heat act thus?" Such a question, it is seen, would have no proper meaning, for it could only be answered by asserting the fact over again, or by saying, "It is *the nature*, the very essence, of gravity or heat to act thus;" that is, it is the nature of material particles, so far as they are affected by gravity, to tend towards each other, and, so far as they are affected by heat, to move away from each other, or to expand. We may, indeed, resolve two or more of these physical forces, hitherto considered as primal, into one; we may, as has been recently done, resolve heat, light, electricity, magnetism, etc., into motion. But then the forces so resolved, of course, cease to be primal, and become derivative or phenomenal; and only their resultant, motion, is now truly primal, thus constituting the ultimate goal, at which all physical inquiry, all demand for a sufficient Ground or Reason, properly ends. The question, *why* motion should act thus, can be answered only by saying, It is *the nature* of motion thus to manifest itself. In like manner, having traced any outward act or particular volition of man to some primitive desire, or original manifestation of Will as such, say, to the desire of happiness, the instinct of self-preservation, or the sexual appetite, we have reached the ultimate Ground or Reason, and can no longer ask Why? Or if the question be asked, Why is the Will so constituted as to desire these things rather than their opposites?—we can only answer, because it is the nature or essence of Will to wish happiness and life rather than misery and death. Further answer than this can no man give.

The same doctrine can perhaps be more clearly and explicitly stated in this form. Nothing in the world needs a Ground or Reason for its *mere* existence, but only for its existence *now* and *here;* that is, for its phenomenal manifestation in Space and Time. We do not ask simply, Why is it? but, Why does it happen *now*, rather than at some other time? Why *here*, rather than elsewhere? We ask, Why does *this* body *now* fall? and not, Why

do bodies generally gravitate? for we conceive that it is of the nature or essence of all bodies, *i. e.*, of *matter* universally, to gravitate. Nothing *makes* it fall; it falls of itself, spontaneously.

We now pass to a more direct consideration of the abstruse and difficult problem concerning Necessity or Freewill. Old and trite though it be, it is still so obtrusive, and in one sense so alluring, that we cannot avoid the discussion, even if we would. From the young child, who, seeking an excuse for some fault committed under strong temptation, exclaims, "I could n't help it," up to the theologian vainly attempting to reconcile divine foreknowledge with human freedom, the man probably never lived whose thoughts have not at times stumbled on some form of this dark problem. Is man responsible for his conduct? When he has done wrong, when he has erred or sinned, could he, by a suitable effort of his will, have determined to act otherwise? If not, if the Necessitarian doctrine be true, then there is not merely no foundation either for morality or religion, but no basis either for divine or human law. According to this theory, vice or crime is inevitable, and we are no more accountable for it than for a fever or an earthquake. Remorse is a blunder, repentance is vain, merit is a mere pretence, self-improvement or reformation is impossible. On this doctrine, man is a plant that grows and thinks, the form and place of his growth, and the products of his thought, being as little dependent on his will or effort, as the bark, leaves, and fruit of a tree are on its choice. All alike are subject to the skyey influences. Food, soil, climate, — these make up the man, and determine what he shall be. They make up the whole man, not merely his animal frame, but his life and soul, if he has any. If these are rich and generous, so will be the man, and his thoughts and actions. His moral nature is nothing, and his spiritual nature is a mere fiction. The laws of matter and the laws of intellect, these govern all, and shape our nature and destiny. And these laws are as permanent and uncontrollable as the laws of gravitation and chemical affinity. Feuerbach, in his ordinary brutal manner, sums up the whole doctrine in this coarse German pun: *Der Mensch ist was er isst.* Man *is* what he *eats.*

The principal argument in favor of Freedom may be very briefly stated; it is simply the testimony of consciousness. We *know*, for it is a fact attested alike by conscience and consciousness, that when two courses of action are presented to us, we are free to choose between them, and therefore have only ourselves to approve or blame for the consequences of that choice. Hence, after the con-

sequences of our conduct have become manifest, we all feel self-reproach or self-gratulation, because we know that we might have willed differently.

The opposite doctrine is an inference from the Principle of Sufficient Reason. The Necessitarian alleges that we could not have willed differently, because no particular volition would be possible, if it were not determined by some antecedent motive or cause to be what it is. If all the antecedent circumstances, the agent's character and this motive included, should remain unchanged, the volition must be repeated; otherwise, a given cause would not produce any effect, which is a contradiction, or there would be a change without a cause, which is impossible. A free volition, it is asserted, would be a cause of action residing in the mind, and exerting itself independently of motives; that is, it would be a *first* cause; in which case, it would be wholly indeterminate, as there would be no reason why this particular volition should be exerted rather than any other.

Sir William Hamilton, borrowing his theory from Kant's Antinomies, admits this argument, and confesses that the doctrine of Freewill is inconceivable, because it asserts that an event, a volition, takes place without a cause; but he maintains that the opposite doctrine, the theory of Necessity, is equally inconceivable, for it involves the assertion of an infinite series of causes, through denying the possibility of a First cause. If no event can happen, except it be determined to happen by some preceding event, then we must go on seeking such preceding events forever. The chain is endless; the series is infinite; and this is just as impossible to thought as the opposite doctrine, that there is a First cause. Thus, Hamilton's view of the conflicting theories of Necessity and Freewill is but one application of his Philosophy of the Conditioned. In his opinion, both doctrines are inconceivable; but as they are contradictories, one of them *must be* true; and therefore, as an inconceivability which is common to both does not disprove either, we must believe in Freewill, which has, what the other has not, the distinct testimony of consciousness in its favor. Then Hamilton's conclusion is, I know *that* I am free, but I cannot conceive *how* I am free.

Then the only reason why the Freewill doctrine is alleged to be inconceivable is, that it supposes volitions to originate without a Cause, so that they seem to be left indeterminate, since there is nothing to determine why we should have one volition rather than another. I demur to this statement, in which it is implied that no

determination is possible except through the action of an Efficient Cause, which, of course, determines *necessarily*. An advocate of Freewill must admit that a volition is determined without a *Cause;* but he does not need to assert that it is determined without a *Reason*. Now *motives* are Reasons, and it has already been made evident from the analysis of the fourfold root of the Principle of Sufficient Reason, that the relation between a Reason and its Consequent is often entirely distinct from that between a Cause and its Effect. The former is merely the *ratio cognoscendi*, that which enables one to *know* what has happened, or what he had better do; the latter is the *causa fiendi*, that which *makes* the thing happen, or *compels* the man to move, when perhaps he is unwilling to stir. The former is a mere synthesis of thoughts; the latter is a physical union of two things. Nay, as I have shown, the Reason usually is the Effect, instead of the Cause; for it is through the Effect, which is obvious, that I come to know the Cause, which is obscure. Because I perceive the ground is wet, therefore I know it has rained. Again, the relation between a Cause and its Effect is fixed and invariable, while that between a Reason and its Consequent is in some degree changeable and contingent. A particular Cause *must* have just this Effect, exactly proportioned to it, and no other; but a Reason only sways or influences the choice, without inevitably leading it to any one conclusion. What is called the weighing of motives, or estimating the comparative value of Reasons for different modes of conduct, is a process of the Understanding, distinctly preliminary to the act of the Will or volition, and usually separated from it by a short but conscious interval of time. In any important call for action, we usually pause to make up our minds as to the proper course to be pursued; and the Freedom of which we are then irresistibly convinced is the direct testimony of consciousness at the moment, both that the final *choice* is in our power, whatever may be the comparative weight of Reasons for it, and also that the crowning *act*, or volition, which is still to come, may or may not follow this choice or resolution, just as we may decide at the last moment.

The Necessitarian really begs the question by taking for granted the doctrine of the Materialist. He assumes that Mind is not distinct from Matter, or in other words, that there is no such separate and peculiar existence as Mind; that man is only a machine, which is but apparently animate, and therefore that he falls entirely under the domain of the *causa fiendi*, and moves

only as he is moved by Physical Causes, strictly so called. If this Materialist theory were true, I admit that the doctrine of the Necessitarian would thereby be demonstrated; for I cannot even imagine any change taking place in Matter, except through the operation of some efficient Cause, whereby it is necessarily determined to be what it is; and I cannot see how a Necessitarian can logically avoid being also a Materialist. The two doctrines respectively maintained by them inevitably go together. But then the distinction already pointed out, and which is as obvious to the vulgar as it is to the skilled logician and psychologist, between the *causa fiendi* and the *causa cognoscendi*, disappears altogether. There is then no difference between the Cause, which *makes* an event happen, and the Reason which merely enables me to know, or inclines me to believe, that it has happened. But it seems to me an unquestionable and even self-evident truth, that the relation between one state of consciousness and another is radically unlike that between one condition of any material object and a subsequent state of the same thing. In the latter case, the change from one to the other is inconceivable, except through the action of some determinate force or physical agency; in the former, it is equally inconceivable that such force or agency should have anything to do with the case in hand. Ideas, states of mind, are not sticks or stones. They are not extended; they are not impenetrable; they do not push, or strike, or block the way, except metaphorically. As Dr. Reid bluntly expresses it, that a motive exerts any force or compulsion upon my will, is an assertion as meaningless as that the motive drinks my health, or boxes my ears.

I have already adverted to the fact, that what are called "motives," as they are Final Causes, and not Efficient Causes, do not in any manner *move* or constrain volitions, but, at best, supply only direction and guidance to an impulse or effort which must originate elsewhere, — which emanates in fact from the man himself, that is, from the self-determining power of his will. A motive is the consciousness of a purpose, and therefore acts only through the understanding, and only on the understanding. The Empiricist, who rejects Final Causes altogether, ought to be the last person to attribute constraining force to motives.

Dr. J. H. Newman, in his "Grammar of Assent," has admirably illustrated the truth, that Assent and conduct, which is merely practical Assent to the Reasons for such conduct, are not necessarily determined by inferences, or deductions of the understanding. "Sometimes Assent fails, while the reasons for it, and the infer-

ential act which is the recognition of those reasons, are still present and in force. Our reasons may seem to us as strong as ever; yet they do not secure our Assent." "And as Assent sometimes dies out without tangible reasons sufficient to account for its failure, so sometimes, in spite of strong and convincing arguments, it is never given." "Again, very numerous are the cases in which good arguments, both really good as far as they go, and confessed by us to be good, nevertheless are not strong enough to incline our minds ever so little to the conclusion at which they point." Even in Mathematics, when the process is long and intricate, and on new and difficult ground, the mathematician will not assent to his own conclusions, however often he has gone over the work, till he has had the corroboration of other judgments beside his own. Yet the corroboration of others cannot add to his perception of the proof; he would still perceive the proof, even though he failed in gaining their corroboration. "Inference is conditional, dependent upon its premises. Assent is unconditional."

"I doubt, indeed," he says, "whether Assent is ever given without some preliminary which *stands for* a reason; but it does not follow from this that it may not be withheld where there are good reasons for giving it to a proposition; or may not be withdrawn after it has been given, the reasons remaining; or may not remain when the reasons are forgotten; or that they must vary in strength as the reasons vary; and this substantiveness, as I may call it, of the act of Assent is the very point which I have wished to establish."

Recapitulating, I say, Determination, as a phenomenon of *choice*, is a function of the understanding, and takes place in view of reasons, miscalled motives, though not, as consciousness attests, under compulsion by them. Volition is force in energy directed to some particular end. Two questions maybe asked respecting it: 1. Whence comes this force? 2. How is the force determined to this end rather than to any other? To the first, I answer, that the force originates in myself, as a *first* cause consciously exerting effort, or putting forth power self-originated, and not merely transmitted passively, as received from another. The second question is answered by saying, that the direction of the effort either follows the previous determination of the understanding, in which case it is *rational* action, or departs from it at the last moment, in which case it is *caprice*. This theory is not presented as a complete solution of the difficulties in the case. Far from it. It is not easy to understand *how* the understanding, when pressed by conflicting reasons, is still free to choose which conclusion it

will adopt, irrespective of the comparative weight or cogency of these reasons; but that it actually does so, and thus maintains its freedom, is attested by consciousness. We voluntarily look away from, or shut our eyes to, the weight of argument and evidence.

> "He who 's convinced against his will
> Is of the same opinion still."

Whatever the philosophers and the pedants may say about it, man is much less a reasoning, than a wilful, animal. The very worst way of undertaking to turn an obstinate man is to argue with him, and to prove that he is mistaken in his premises or his logic. He has a reason for his decision, so that it is not altogether arbitrary and capricious; but this is not necessarily the strongest reason, even in his own estimation. The error of the Necessitarians consists in affirming, that there can be no guidance at all of the choice, unless it is absolutely controlling guidance.

The fact probably is, that Reasons cannot be measured by pints, or weighed by ounces, or even by grains. Their influence is not quantitative, but qualitative. We cannot tell why a volition is determined to one end rather than any other, simply because we are unable to see how reasons can be thus equally balanced, or rather, how they cannot be compared with each other in respect to weight or influence. But we know from consciousness that they are thus equally balanced, or are incommensurable. The word *motive*, as it signifies *that which moves*, and implies a quantum of generating force, is either an unfair assumption of the whole dogma to be proved, or a misleading metaphor.

But whatever the relation may be between the Reasons and the consequent choice or determination, there is the clearest evidence that it is not the same with the relation between a Cause and its Effect, and even that there is no proper similitude between them. A Cause in energy must be instantaneously followed by its Effect, if indeed the two are not more properly said to be simultaneous; for the former is in operation only so far as the latter is produced. According to the Necessitarian theory, then, the will cannot remain dormant while the Reasons for action are present to the mind, any more than a balance can remain in equilibrium after a weight has been put into one of the scales. If the volition must follow the strongest desire, then it must follow instantly; since an inherent or uncaused power to delay is equivalent to a power to resist. But as John Locke remarked long ago, the mind has, as is evident in experience, a power to suspend the execution and satis-

faction of any of its desires, till it can consider and examine them on all sides; and he rightly adds, "in this lies the liberty a man has." Then the Necessitarian is compelled to assert, that an antecedent volition is necessary to determine the will to inaction; or, in other words, that we need to will that the will should remain dormant, in regard to selecting one out of two or more contemplated courses of action. We deny any such need. Will is power; but it is not necessarily, or always, power in action. Like imagination, it is a power or faculty which is called into action only occasionally, sometimes after long intervals. While the understanding is wholly absorbed with some object of cogitation, as in working out a mathematical problem, or considering Reasons for divergent courses of conduct, we are not conscious of *willing;* and the existence of a volition to suspend volition, at such a moment, is a blank hypothesis invented to save a theory. But the Reasons are then present to the mind, which is deeply engaged in considering them; that is, what the Necessitarian calls the Causes are present, and yet the Effect does not follow.

Again, when several desires, leading in different directions, are all present to the mind at once, if their action upon the will were that of causes producing their effects, the action ought not to be in the direction of the strongest desire, but in that of the resultant of all the desires combined; which is contrary to the fact. For example: I may have one strong wish to go to Boston, and another, almost equally urgent, to visit Medford. Then, on the Necessitarian theory of the inability of the will to act except as it is acted upon, I ought to go to neither of those places, but to Charlestown, which lies about half way between them, and whither I have no motive at all to go; where, in fact, it might be very inconvenient for me to find myself. Therefore, either the doctrine of the mechanical or causative power of Reasons and desires is unfounded, or the whole science of mechanics, which is founded upon the composition and resolution of forces, is false.

According to the Fatalist doctrine, every phenomenon is both a cause of its invariable consequent, and an effect of its invariable antecedent; and this antecedent, again, is an effect of *its* antecedent, and so on forever. This series of antecedents must be infinite; for if we stop at any one antecedent, whether near or remote, that one is an absolute commencement, or First Cause. Either the chain is infinite in length, therefore, or it has a first link, place this where we may. But an infinite series is just as impossible to thought as an uncaused volition, or First Cause; and thus the

Necessitarian escapes from one inconceivability only by throwing himself into another. In following the series of causes, he who stops at any point short of infinity necessarily admits a First Cause at this point, and therefore might just as well have done so at the outset.

When it is urged, that what I am *able* to do is not a subject of consciousness, but only what I actually do or feel, the answer is, that the *exercise* of ability, the exertion of power, *is* a subject of consciousness. Ability and force are attributes or powers of the mind; and we are directly conscious of them when they are exerted or put forth, just as we are conscious of fixing the attention, or controlling emotion, by a strenuous effort. Whether the attempt succeeds or not, is a point of no importance for our present purpose; what I know is, that a vigorous effort was made to insure success. Even in the case of a muscular strain, the failure of the endeavor is far from negativing the consciousness of that endeavor. On the contrary, perhaps a strong man is never so fully aware of the extent of his powers, as when he has attempted to accomplish some remarkable feat, *and failed;* for success comes before, but failure only after, he has put forth his whole strength.

Observe, however, that what we thus strongly assert is the ability *to will*, not the ability *to do*, or accomplish, the meditated feat; the latter, so far as it is an actual contraction of the muscles, can be known only through its results. But in one sense, and that a very important one, as already observed, the volition *is* the action, in its subjective and moral aspect, since it is for this alone that conscience holds us responsible. A mere volition to commit murder *is* murder, before God, though not at man's tribunal; since *we* can know the volitions of our fellow man only by their results, his outward acts.

It is admitted, on all hands, that the internal force of volition is absolutely free from compulsion or restraint by any power whatsoever applied to it *from without.* No external force can constrain the will. Bind me hand and foot with chains, and I am still conscious that my will is just as free as ever. But if consciousness is thus competent to declare, and thereby to prove, the freedom of the will as against *external* compulsion, against bolts and chains, it is equally competent to affirm the like freedom as against *internal* compulsion, against pressing inducements and urgent desires. No one can candidly deny, that its testimony is just as clearly and positively given in the latter case as in the former. Whatever inducements may be present to my mind, I am still conscious that I

can resist them all, *can will* the very act from which they seem to be doing their best to restrain me. A very considerable, even a painful, effort may be necessary to this end; still we are conscious that it is a possible effort.

"Whence is it," asks Dugald Stewart, "that we consider the pain of the rack as an alleviation of the falsehoods extorted by it from the criminal? Plainly because the motives presented to him are supposed to be such as no *ordinary* degree of self-command is able to resist. And if we were only satisfied that these motives were *perfectly irresistible*, we would not ascribe to him any guilt at all." But we are not so satisfied; we know that, even on the rack, he *can* persevere in willing to tell the truth. According to Mr. J. S. Mill's theory, the motives are "irresistible;" yet we do him the justice to believe that, in spite of his theory, he would still censure the man for uttering the falsehood. Again, we ask, why accept the testimony of consciousness that these considerations, of extreme present pain and a strong desire to be released from it, do press and solicit with an urgency which it is difficult to withstand, and yet deny the equally positive evidence of the same faculty, that we *can* withstand them? If we can weigh motives against each other, pronouncing this strong and that weak, we are surely competent to pronounce that any one, or any number, of them is weak or powerless against a fixed determination of the will.

Again, we all know that many states of mind are involuntary, as they come and go in spite of ourselves. This is the case generally with most states of the understanding, with our perceptive faculties, and especially our aversions and desires. We cannot avoid hearing sounds and smelling odors, if the air be full of noises and fragrance. We cannot help coveting relief from pain and freedom from anxiety; novel and terrible objects affect us with fear, against which our most courageous feelings vainly strive. Consciousness testifies to this impotence, this absence of freedom. How, then, can we consistently refuse to accept its testimony in the case of volitions to the converse fact, the presence of freedom and the existence of power? Two opposites explain and limit each other. I could not know necessity to be necessity, except by knowing freedom, and conceiving necessity as its opposite; just as I cannot know pleasure, except by recognizing it as the opposite of pain. Therefore, those who deny us any knowledge of freedom, really preclude us from any recognition of necessity.

Hitherto, I have argued against the old form of the doctrine of

Fatalism; — namely, that the strongest motive is a Cause, and, as such, *compels* the volition, as an Effect, to follow it. But the modern Necessitarians, since they ignore, or deny altogether, the notion of Efficient Causation, reject also the idea of *compulsion*. They argue from experience only. Certain inducements and desires being present to a mind of a given character and disposition, we find from experience, they say, that a volition corresponding to the relative strength of these inducements, and to the prevailing bent of the disposition, invariably follows. "A volition is a moral effect, which follows the corresponding moral causes as certainly and invariably as physical effects follow their physical causes." Mr. Mill acknowledges himself to be entirely ignorant whether it *must* so follow; "all I know is, that it always *does*." By virtue of this distinction, which rejects coercion, but denies ability, he hopes to wipe off the most repulsive aspect, and to escape the most appalling consequences, of pure Fatalism.

I must avow a strong belief that this is a distinction without any essential difference. It makes no possible difference to the prisoner, though bolts and fetters do not *compel* him to stay in his cell, if he is so disabled that he *cannot get out* of it. Our quarrel with Mr. Mill is not for what he asserts, but for what he denies. He does not affirm Compulsion, but he denies Freedom. If my Volition "always does" follow the strongest motive, it is not at liberty to go in any other direction; and there is small comfort in being reminded, that the lack of liberty does not arise from the application of any force whatever.

On the old theory, the will is like an unfortunate man tied hand and foot, and dragged after the heels of a mad bull by a rope attached to the animal's horns. This is the doctrine of Fatalism; wherever the bull gallops, the man *must* follow, by *compulsion*. But this is not Mr. Mill's theory. He asks us to believe that the rope has disappeared, and that there is no compulsion in the case, whether visible or real; and yet that we learn from actual observation, that the man "always does" follow his grim antecedent at the same distance as before, each bound of the one being copied by a corresponding leap of the other. This, he says, is not Fatalism, is not even Necessity, since there is no *must* in the case. But it is what he calls, at one time, the "Determinism" of the Will, and at another, "Moral Causation," or the doctrine of invariable sequence.

Evidently this latter statement of the theory is more unwarrantable than the former. We can understand the necessity which

has a cause, the lack of freedom which proceeds from restraint, or that one should be a slave when he has a master. But without a cause, without restraint, without a master, it is not merely incredible, but inconceivable, that the will should not be free.

We come, then, to the question of fact, and are met by Mr. Mill's vehement affirmation of the point, "as a truth of experience, that volitions do, in point of fact, follow determinate moral antecedents with the same uniformity, and (*when we have sufficient knowledge of the circumstances*) with the same certainty, as physical events follow their physical causes."

Observe the parenthetical qualification; for since we surely do *not* "have sufficient knowledge of the circumstances" under which any one of our fellow men acts, to be able to predict, with any certainty, what his actions will be in one case out of a thousand, it is obviously not "a truth of experience," but one of very doubtful inference, in the vast majority of instances, that those actions are rigidly uniform and subject to law. *Varium et mutabile semper femina* is a most unjust aspersion of one sex, so far as it implies that they are one whit *more* whimsical and capricious than the other. To any student of human nature, to any keen observer of life and manners, this comparison of the conduct of men on ordinary occasions, with the invariable sequence of mechanical and chemical phenomena in the outward universe, will appear amusing on account of its very extravagance. On such a subject, the appeal lies, not to philosophers and men of science, but to poets and dramatists, to biographers, essayists, moralists, men of the world, and men of affairs. I confidently invoke all literature, excepting only treatises on physical science and the speculations of system-mongers on abstract subjects, for proof of the assertion, that no two men ever act alike under the same circumstances, and that no one man ever adopts precisely the same course of conduct on two similar occasions. I would almost define man to be an animal that never repeats himself. We might challenge the Fatalist himself to say whether, out of the thousand little actions which fill up one of the ordinary days of his life, any three ever resemble each other as closely as do three beats of the pendulum of his clock. One who has gone through the process of learning to play on the piano can tell whether it was an easy task to reduce the movements of his fingers to mechanical uniformity in striking the right notes at the right moment. Evidently, what has to be educated in this case is the will, not the muscles; for, at the outset, the fingers may already be deft enough in executing other little tasks, equally minute, with all needed precision.

Whatever may be made out, then, by inference, analogy, and theory, I stoutly deny that the uniformity and certainty of volitions is "a truth of experience," meaning thereby a fact patent to observation. Mr. Mill could not have chosen a weaker position for his doctrine, as nearly all the facts point directly the other way. He would say, of course, that when the volitions vary, the antecedents are different. Be it so, for the nonce; but if the antecedents are hardly ever the same, the uniformity of the volitions is certainly not a truth of experience. And since these "moral antecedents are desires, aversions, habits, and dispositions" in another man's mind, how can any one not gifted with omniscience declare, that they are always different when the volition is not the same, and always alike when a volition is exactly repeated? In truth, what is here claimed as "experience" must be resolved into an inveterate preconceived opinion, that even the actions of the human will cannot escape the universality of law; — an honest opinion, it may be, but one which takes for granted the whole matter in dispute.

I am far from denying a certain measure and kind of uniformity in human conduct. The doctrine of Free Will recognizes this fact, and accounts for it by the essential unity of human nature. It is certain we often act uniformly, because we are *rational* beings; and we often act inconsistently and not according to rule, because we are *free* beings. Men are similarly, though not equally, endowed with the great springs and impulses of activity, — with corresponding appetites, affections, and desires, which determine the principal Ends of action, and with intellectual powers that are homogeneous, though not equiponderant, so that often similar Means are adopted for effecting our purposes. Whole sciences, such as ethics, politics, political economy, and the philosophy of history, are built upon this general accordance of human beings with each other; though the surface of life is constantly broken and fretted by the idiosyncrasies of intellect and character. A prevailing unity of aim and purpose is created by the wants and necessities even of our physical being; and some uniformity of conduct is the obvious result of the similar circumstances by which we are surrounded. But above and around this accordance of general features, there is room for infinite variety of details, and a boundless field for the freedom of particular volitions.

The Necessitarians utterly mistake the lesson which is taught by "the statistical results of the observation of human beings, acting in numbers sufficient to eliminate the influences which operate

only on a few, and which, on a large scale, neutralize one another." What these show is that similarity of leading purposes, and correspondence of general ends and aims, which result from the endowment of all men with the same passions, and from the unity in kind, though not in degree, of our cognitive faculties. They afford little or no evidence of the agreement of men with each other in the single acts and special volitions which are the Means by which these leading purposes are carried into effect; that is, they give hardly any testimony which is relevant to the present discussion. Thus, all men desire society, approbation, power, wealth. Experience teaches them by what *general* lines of conduct these ends may most probably be attained; and along these lines, men move with a good degree of uniformity, though by no means with the same speed or eagerness. To the attainment of these broad and common ends a vast number of particular aims and efforts, — the special undertakings of professional, commercial, mechanical, and social enterprise, — are subservient; and here, unity of action is much less obvious, and often cannot be traced at all. Then, each of these less general ends can be pursued only by an almost countless multitude of *special* volitions, which escape the dominion of law altogether, and manifest only infinite variety and caprice. Here is the proper realm of the Freedom of the Will; the uniformity which was found before, in the *general* purposes of life, — which is proved by statistics, and is the object of discussion in the moral sciences, — is traceable not so much to the Will as to the unity of our intellectual and emotional endowments. It characterizes those acts of the understanding which lead to *choice* or *preference*, and which, as we have seen, not only precede the action of the Will, but are usually separated from it by a conscious interval of time.

Analyze such statistical evidence as has been collected by Quetelet and other observers, and the correctness of these observations will be apparent. The events which are thus proved to recur, year after year, in nearly the same degree of frequency, maintaining almost an equal proportion to the whole number of people, will be found complex in nature, alike only in outward aspect, springing from different motives, and carried out by very dissimilar means. Thus, the number of homicides, suicides, robberies, petty thefts, cases of intemperance, and the like, that occur annually in a given population, are cited as proving the reign of law where it would be least expected. But how unlike is one case of homicide or suicide to another, — unlike in the passions which

produced them, the circumstances which excited these passions, the quickness with which the determination was carried out, and the means by which the crowning act was perpetrated! The lawyers, after a very imperfect analysis, distinguish at least half a dozen kinds of killing. One man jumps overboard because crossed in love; a clerk or trustee hangs himself because detected in embezzlement; a gambler throws away life after fortune; a sentenced criminal escapes the shame of a public execution; the prosperous man destroys himself in a fit of insanity. Statistics which lump together so dissimilar acts as these prove nothing as to the uniform sequence between volitions and their moral antecedents. To hunt through the history of the world for one human act perfectly resembling another, not only in itself, but in the motives which produced it, would be as bootless an undertaking as to take up the challenge of Leibnitz, and seek on an oak tree for two leaves which should be exact counterparts of each other. And yet the Necessitarian claims uniformity of sequence between motives and volitions as "a truth of experience!"

CHAPTER XVII.

FICHTE.

THE general result of Kant's Critical Philosophy is that all knowledge is limited and conditioned by experience. We know only phenomena, only that which appears. But being in itself, the real ground of that which appears, the thing as it actually is, apart from its manifestation to us, is absolutely incognizable. We have no faculty capable of grasping what transcends the sphere of sense; we must be content with what is given to us, and as it is given to us. There are inborn and necessary principles of the human understanding, synthetic cognitions *a priori*, valid for *all* experience, but valid *only* for experience. And yet Kant is a realist. He maintains that there are noumena, *dinge an sich*, things as they really are; for there must be a ground or basis of what is manifested to us under the forms of space and time, and in accordance with the Categories. He is driven to this admission by what he had conceded in the outset; that there is a receptivity, as well as a spontaneity, of the human mind, and, consequently, that there is something given to and received by the mind, apart from its power of reacting upon and modifying what is thus given. If nothing *is*, nothing would *appear*; if there were no reality, there would be no phenomenon, and nothing to determine why the object should appear thus, rather than otherwise. What this noumenal reality is, we do not know, and never can know. Kant only asserts that it is; we never can know what it is, or how it is.

Then came Fichte, whose endeavor is to sweep away even this poor ghost of actual being, and to refashion Kant's broad but discursive survey of the limitations of human knowledge into a scientific and rigorously demonstrated system of Idealism, or rather of absolute Egoism; a system which is, in fact, a combination of Spinozism and Berkeleyanism. Fichte reduces the universe of existence to one absolute and universal Ego, which spins out in thought an imaginary world and a finite and particular Ego, only as a

means of arriving at a consciousness of itself. His system differs from that of Kant, therefore, in two important respects: first, as it teaches idealism instead of realism; and, secondly, as it is an attempt to establish a philosophy of the absolute and the unconditioned, and thus to build up dogmatism again, in spite of the pretended demonstration in the "Critique of Pure Reason," that such an undertaking transcends the limits of the human intellect.

Johann Gottlieb Fichte (born 1762, died 1814) began his philosophical career by publishing, at the age of twenty-nine years, a book composed by him in four weeks, entitled a "Critique of all Revelation." It was an attempt to determine *a priori*, on the principles of the Critical Philosophy, whether any special revelation from God to man is possible, and, if so, what *must be* its nature and evidence. In other words, supposing the existence of a God, and of a race of beings constituted and situated as we are, the purpose is to determine whether it is conceivable that He should make a special communication to His creatures; and, if so, what must be its purport, and how the message could be authenticated. As the doctrines expressed were very similar to those of Kant, and as the work was first published anonymously, in 1791, it was at first universally attributed to Kant himself. But he disavowed it by the complimentary remark, that he should have deemed it an honor to be the author of so able a book; and two years afterwards, he attempted to solve the same problem himself, by publishing his treatise entitled "Religion within the limits of mere Reason." Both writers endeavor to expound that system of Rationalism in religion, which is the only one consistent with the principles of the Transcendental philosophy. Fichte's conclusion is, that if the doctrine which claims to be revealed from heaven contains anything more than the Moral Law, originally written in our own hearts, it cannot be of divine origin; if it be perfectly coincident with that Law, it is useless, and can in no proper sense be called a revelation. Still, he says, we can conceive of a people reduced by circumstances to so low a state, that even the wish to comply with the dictates of conscience has either died out among them, or has never been developed. To such, a revelation authenticated by miracles may temporarily be of use, in order to awaken among them, by awe and wonder, a due sense of moral obligation, to stun their senses into obedience, and to guide their first attempts in virtue. When they have advanced far enough in moral and religious culture to recognize the independent and imperative character of the law of conscience, there will no longer be any

need of a message from God, and their now enlightened intellects will soon perceive that the assumed evidence of its authenticity is illusive and baseless. The general doctrine of Rationalism is, that religion is only a sort of moral go-cart; the natural development of the child's own powers soon enables it to walk alone.

Compared with other works of the same class, Fichte's "Critique" has high merits in point of execution. It attracted notice by a Titanlike audacity of speculation, which seemed to aim at scaling the heavens and prescribing limits to Omnipotence. Of course, the work bristles all over with the formidable terminology of its school; but in point of clearness, precision, and brevity, it is far superior to the writings of Kant. The conduct of the argument throughout is marked by severe logic and admirable arrangement. The style is dry, as the nature of the subject demands; but in treating of the theory of morals, and especially in developing his pure and lofty conception of absolute right, the writer kindles with his theme, and the argumentation, though still severe, swells into chaste and impressive eloquence. The well-merited reputation, which it established for its author, was the means of procuring for him, in 1793, a professorship of philosophy at the university of Jena, a situation which rescued him from the extreme poverty which seems to have been the common doom of the great thinkers of Germany during the earlier portions of their career. Here, the first year after his appointment, he published his *Wissenschaftslehre*, or "Theory of Science," the first sketch of a system of philosophy which really controverted the principles of Kant, though it professed only to carry them out to their farthest consequences, to reduce them to rigorous precision and method, and thereby to erect in stately architecture a system of human knowledge upon a foundation as broad and sure as that which Euclid constructed for geometry. He who studies the *Wissenschaftslehre* will not find his progress impeded, as in the case of Kant's "Critique," by any marked defects of style. Fichte is a good writer, distinct, concise, and forcible; but he abuses his power of strict argumentation and abstract thought. His work is as arid and forbidding as the desert of Sahara. It is a *tour de force* of abstruse and repulsive metaphysics. If first published in any other country than Germany, it would never have found a reader. I shall not attempt any exposition of it at full length. It will be enough to penetrate so far into the system that the reader may discern its prominent characteristics, and make out its general bearing and tendency.

Every particular science, says Fichte, must have one fundamental principle, on which all its conclusions are based, or to which they can be traced back. This one principle the science itself cannot undertake to prove; it must be taken for granted, as certain, beforehand. Then there must be some universal science, whose office it will be to demonstrate the fundamental principles of all the particular sciences, and thereby to build up the edifice of all human knowledge into one structure, coherent in all its parts, firmly bolted together, uniform in its development, and self-consistent throughout. This universal science, therefore, will be the Theory of Science in general, or the Science of Sciences, because it will be the common foundation, of which they are the superstructure. Moreover, like them, it must have its own fundamental principle, which, as there is nothing lying behind or above it, cannot be proved; for as it must be the ultimate means of proving every thing else, it cannot be deduced from any other truth without reasoning in a circle. And yet it must in some manner be established; otherwise, the scientific arch would be without its keystone; we should have the particular sciences resting each on its own fundamental principle, these principles collectively on the *Wissenschaftslehre*, this universal science based on its own first axiom, but this axiom, this corner-stone of all science, resting on nothing, a mere baseless assumption. To say that we *must* begin by taking at least one such principle for granted, is to give up all pretension of being scientific, and to proceed arbitrarily, according to our own good will and pleasure. To affirm that this ultimate principle shines by its own light, so as not to need any proof, is only to say that it *appears to us* to be thus self-guarantied; and this would be giving it only phenomenal or apparent validity; it would be true *for us*, but not true absolutely. Even if it were innate, or a part of the original structure of our minds, it does not follow that it must be authoritative; for we have not yet proved the existence of Mind or Self, much less the validity of all innate principles.

It is evident, therefore, that Fichte came forward as the rival of Descartes, having the same end in view which was proposed in the "Discourse on Method," adopting similar means for the accomplishment of this end, and, as we shall soon see, in the initial steps of his system, arriving at precisely the same results as those established by his French predecessor. It is merely a difference of language, not founded on any divergence of thought, to say that Descartes began by doubting every thing, and Fichte by taking nothing for granted. The purpose of the two systems was the

same, namely, to find a corner-stone which should be steadfast and immovable, not based on anything else, because needing no support beyond itself, and also capable of serving as a foundation on which the whole fabric of human knowledge might securely rest. Can any truth or fact be pointed out which is absolutely self-evident and unquestionable, which skepticism itself cannot doubt, and which is also a fruitful principle, so that all other truths may either be directly elicited from it, or be traced back to it as the ultimate means of their confirmation? If such there be, then the doctrine of the Relativity of Knowledge, which is much in vogue at the present day, must be abandoned. It would be difficult to find two philosophers more unlike each other in their characters, their tastes and pursuits, and the general tendencies of their intellects, than Descartes and Fichte. They were trained in wholly dissimilar schools of thought, and approached the problem in opposite directions. But they arrived at the same result. Both teach that the central truth of philosophy, and therefore of all human knowledge, is the existence of Self, the indivisible and consequently immaterial Ego of consciousness.

But I go back to Fichte's own exposition of the manner in which he arrived at this conclusion. We have to search for the absolute, first, and unconditioned principle of human knowledge. It cannot be proved, for there is nothing behind or above it; it cannot be determined, for there is nothing to limit it or render it definite. It cannot be an empirical fact of consciousness, for it must be thought as the basis of all the truths of consciousness. If there be any such principle, it must be that the very act of affirming it constitutes its existence and its proof. It must be, at once, the act of affirming and the truth affirmed, the action and the result of the activity, the truth cognized and the act of cognizing it, both in one. It must be what Fichte calls a *Thathandlung*, "a fact-action." Every other truth may be divided by abstraction into two parts, its matter or content, and its form; — that is, something whereof we know, and that which we know respecting that something. For instance, to adopt Fichte's own illustration, in the proposition, "gold is a metal," the matter or content is "gold" and "metal;" for about these we know; and what we know of them, or the Form of the judgment, is, that these two in a certain respect are one — that gold *is* a metal, so that one can be substituted for the other. But as the absolute fundamental principle of the *Wissenschaftslehre* is to be the ground of all certainty, and to come before all other knowledge, no Matter or Content can be pre-

viously given to it about which to know; but what we know, or the Form, must constitute that respecting which we know, or the Matter; and the reverse. Its Form must determine its Content, and its Content must determine its Form. And this is only repeating what was said before, that it must be a *Thathandlung*, the act of knowing and the truth known, both in one. In other words, the fundamental principle of all our knowledge must necessarily be a formal and a material principle, both at once; that is, it must be not merely an abstract Form or Rule, which fashions into unity the Matter of our thought, this Matter being given to us from without, but it must be a productive power, which, from itself, first gives us the Matter or elements of the knowledge, and at the same time, and in the same act, moulds and fashions this Matter, bringing it into a determinate Form. Let us then try to find such a fundamental principle, or "fact-action;" since it can only be found by experiment.

Let us first take the identical proposition, A = A, or the equivalent expression, A is A, which everybody will admit to be *absolutely* certain, that is, certain in itself, without any ground or reason for its certainty; and by admitting thus much, every one ascribes to himself the power of absolutely affirming something. But by so doing in this case, he acquires only the Form of knowledge, without any Matter or Content. For the proposition, A = A, does not tell us *what* A is, or even *that* A exists, either as its subject or its predicate. It only affirms — "*posits*" is the technical term for affirming — it only posits that, *if* A is, *then* it is equal to A. In technical phrase, then, the proposition is unconditioned or absolute in Form, but conditioned in Matter. Thus we only affirm absolutely an act of knowing, but not as yet anything about which this act is conversant. But even to affirm only an act of knowing, is to affirm that *I* know; for an act is impossible without an actor; a deed requires a doer. To adopt Fichte's language, "in so far, at least, as any connection is affirmed between A as subject and A as predicate, that connection is posited in and through the Ego." In short, every thought, because it is an act, requires a thinker; and as the proposition, A = A, is certainly thought, there must be an Ego who thinks it; — not necessarily *your* Ego, nor *my* Ego, for as yet it is perfectly indeterminate; but only a thinker, a universal Ego. Egoity and individuality, the pure Ego and the empirical Ego, are entirely different ideas.

The same reasoning may be more clearly stated as follows: In the proposition, A = A, the first A, which is the Subject, is

only affirmed conditionally. *If A is*, then it is = A. But the second A, which is the Predicate, is affirmed absolutely; for if the condition is fulfilled, then, beyond all question, the first A must be equal to the second. Now what is it which brings these two terms into this relation of equality with each other? What is it which here acts, — which judges, affirms, and constitutes this relation between them? Evidently it is the Ego; it is I myself. Take away the Ego, and you take away the relation; you remove the two terms; you cancel the proposition. Then, above the proposition, A = A, well founded as it appears to be, there is a higher truth, a truth more immediately known; namely, the act, and therefore the existence, of the Ego. Then the proposition, Ego = Ego, or I AM, is unconditional both in Matter and in Form! The first Ego, or subject, is affirmed unconditionally, as well as the second Ego, or predicate. This judgment, then, Ego = Ego, I am, is *absolute* truth, dependent on no condition whatsoever. Here, then, we have the absolute fundamental principle of which we were in search, the ground of all certainty, that on which all other knowledge depends, but which, itself, depends on nothing else; it is absolute. Every other cognition implies and depends upon this one,-which is the highest of all.

"The question has been asked," says Fichte, "What was I before I became self-conscious? The answer is, I was not at all, for I was not I. The Ego *is*, only so far as it is conscious of itself." In affirming that I am I, the Ego posits itself without needing to be contra-distinguished from something which is not-itself; for in this judgment, the predicate is identical with the subject. One is affirmed to be absolutely the same Ego as the other. And further, as already observed, by asking what I *was*, you assume the existence of a *past*, and therefore the reality of Time, the existence of which has not yet been proved. If you did not assume what you have no right to take for granted, namely, the reality of Time, you would not ask the question.

Then this truth is not only absolutely certain, but it is also the fundamental principle of all knowledge; since knowledge would not be knowledge, unless I know it; that is, unless I exist as the subject knowing, and, by contradistinguishing myself from the object known, affirm my own existence. Here we have, then, that corner-stone of the whole edifice of science which was the object of inquiry. The Ego is a necessary element of all knowledge, and is the absolutely Unconditioned, or, more briefly, the Absolute; for it is out of relation to anything else, is thus indepen-

dent of every thing, and self-existent, because it exists merely by affirming itself. As I have said, it is not my Ego, nor your Ego, nor any Ego in particular; for as yet, there is no distinction between me and you, but whoever posits *the* Ego, is that Ego, and is alone in the universe. Any other existence can be known only by distinguishing it from something else. This alone exists merely by affirming its own existence, and is perfectly indeterminate, because it is distinguished from nothing. It posits only its own being, and it *is* by virtue of that positing. It is created from nothing, but every thing in the whole fabric of science must be created or developed from it. All knowledge is a mere self-development of the Ego. I am every thing, and every thing exists only in my thought. This is absolute Idealism, or rather Egoism and Pantheism both in one.

What can be said of such a monstrous system as this, except that it is very curious and ingenious, and is a marvel of rigorous argumentation and abstract thought? Like Spinozism, which it very closely resembles, it is an exaggerated and one-sided development of Cartesianism. It is really all contained in the "I think, therefore I am." Descartes says, Skepticism itself cannot doubt the existence of thought, for doubt is thought; and when I think, I am. Having thus secured the existence of a thinker, Descartes proceeds from one of the ideas in this thinker's mind, that of a perfect and infinite being, to prove, first, the existence of a God, and then, through the veracity of God, the trustworthiness of our faculties, whereby we are assured of the existence of other human beings beside ourselves, and of a real universe, such as these faculties make known to us. Thus, out of the abyss of thorough-going skepticism, out of doubting every thing except the presence of thought to consciousness, Descartes works his way up to a full conviction of the reality of every thing that is witnessed by sense or proved by logic. In truth, his system, because it is self-consistent throughout, is more complete and satisfactory than that of any of the philosophers of the Absolute who came after him; for by reasoning back from the veracity of God, he establishes the validity of those original laws of thought on which all reasoning depends. His German successors are compelled to assume, without proof, this trustworthy character of the first principles of logic, since otherwise they could not take a step towards building up a theory. Fichte proceeds only half way along with Descartes, and then stops short. According to him, every judgment, because it is an act of thought establishing the relation be-

tween a subject and a predicate, though without positing the existence of either, assures the reality of an actor or thinker; and this Ego posits its own existence by an act of self-consciousness; since the identical judgment, "I am I," needs no confirmation beyond itself, but is absolutely certain in itself. But Fichte refuses to carry the system any further. He will not admit the Cartesian argument for the being of a God, after the merciless criticism to which it had been subjected by Kant; and he therefore leaves his Ego alone in the universe, an absolute, impersonal, and inconceivable Being; or rather, he proceeds by attempting to show how the Ego evolves out of the depths of its own consciousness an imaginary non-Ego, and thereby an ideal universe, peopled with ideal beings, whose imagined existence is the only means whereby it can become conscious of its own individuality, or supposed relative and limited existence.

Here, then, we have the grave question distinctly brought before us, whether Absolute Idealism, or Solipsismus, as the Germans now call it, is a tenable and sufficient system of philosophy. As the result of the prolonged inquiry into the origin, the nature, and the certainty of human knowledge, are we compelled to adopt this lamentable conclusion, that the universe, both of mind and matter, is only "the baseless fabric of a vision," a mere dream floating before the thought of a solitary and impersonal thinker? This is the abyss of nothingness in which every Monistic scheme, every "Philosophy of the Absolute," if logically carried out, inevitably terminates. A system of Absolute Idealism must be sharply distinguished from the modified and partial Idealism, which is taught by Berkeley and his followers. The essence of the former is Monism, or the doctrine of *Alleinheit;* that Plurality, even in its earliest stage, as Dualism, is only phenomenal, since all real being is absolutely one. Except in the mode of its presentation, there is no novelty in it; it is only a revival of the Eleatic school; Xenophanes and Parmenides taught the same system nearly three thousand years ago. But the modified Idealism of Berkeley, distinctly recognizing the existence of other finite minds outside of the thinker's individuality, and of the Infinite Mind which is partially mirrored in them all, teaches the plurality or multiplicity of individual being, and eliminates matter from the universe only by spiritualizing it, and then holding it to be the type and essence of reality. Strictly speaking, then, Berkeleyanism should not be called Idealism, but Spiritualism, since it teaches the reality of a Non-Ego as presented in countless forms to our

thought, though these forms or manifestations are not corporeal objects, but spiritual objects. It was a gross blunder of the Scotch school, of good Dr. Reid and his followers, to regard Berkeley's system as skeptical in itself, or as tending indirectly to skeptical conclusions.

It is objection enough to any system of Absolute (subjective) Idealism, like that of Fichte, that it does not reach the end in view; it leaves the problem only half solved; it stops far short of the very purpose which philosophy was instituted in order to accomplish. Even if we adopt its conclusion, and resolve all things into a mere dream, the mystery of the universe, as presented to our thought, remains just as inscrutable as ever. For the question immediately arises, Why *this* particular dream, rather than any other? Granted, if you will, that the universe is only a phantom, and that there is no speculation, no reality, in those eyes that it does glare with. Still it must be admitted, that it is a perfectly definite phantom, intricate and far-reaching, with countless parts and attributes, all artistically arranged, fitted to each other and jointed into one whole. It may be a mere dream; but it is an extensive, orderly, and consistent dream, and not a mere jumble of incoherent fancies, like those crowded together in a sick man's brain. Still less is it of excessive simplicity and indefiniteness, a mere Non-Ego, as it is presented by Fichte, with no characteristics at all; — a mere *Anstoss*, or point of resistance external to thought, by impinging on which the Ego is first waked up to a consciousness of its own distinct and individual existence. The bloodless and featureless Non-Ego, which alone this system is able to conjure up, advances us hardly a step in our attempt to understand the mystery even of a dream-creation, such as is actually presented to our thought. Even Fichte's elaborate evolution of the Kantian Categories from the depths of the Ego's thought does not help him, and brings him hardly an inch nearer a solution of the problem; for these Categories of quantity, quality, relation, etc., are still lofty and vague abstractions, without one particularizing element, and so incapable of giving definite dimensions, shape, or color to a single phenomenon in the universe. Fichte's conception of the Non-Ego is that of a completely empty and indefinite Object, the only office of which is to put a limit upon the Ego; there is nothing to be perceived in this Object, except that it is opposed to the Subject. Such a Non-Ego affords no explanation whatever of the universe either as it really is, *per se*, or as it appears to the human mind; — either as a noumenon, or as a

phenomenon. The system of Absolute Idealism, therefore, logically dovetailed together though it be, is as idle and profitless a speculation as the perverted ingenuity of man ever put together.

Another objection to it was strongly urged by Schelling. The doctrine, that every thing exists only through the Ego and for the Ego, is indeed a flattering one for human pride, and for our boastful feeling that we are dependent solely on ourselves. But it is Thrasonic and overweening in its assumption; and when closely examined, its extravagant pretensions are revealed in their true character, as arbitrary and baseless. For though it is true that the outer world exists only *for me* and *through me*, and in so far only as I also exist along with it, and as I am conscious of myself in so doing; the counter proposition is also true, that I exist, and am conscious that *I am*, solely on condition of the outer world also *already* existing beside me, not as my creation, not as produced by me, but as the indispensable prerequisite for that consciousness and that affirmation of my own existence, through which only, according to Fichte, I first become myself. Granted, that the Object depends on the Subject; is it not equally evident, that the Subject depends on the Object, and that the one cannot be conceived without the other? The two correlative terms cannot be separated even for a moment, without destroying the relation between them, and thereby annihilating both. But I need not dwell upon this criticism here; since the divergence of Schelling's own system from that of Fichte begins precisely at this point, and therefore the subject will come up for consideration hereafter.

Let us now trace a few steps of the process whereby the absolute Ego, according to Fichte, arrives at a consciousness of a personal and determinate Ego, through opposing to itself an imaginary Non-Ego. Here, I shall only attempt to indicate some of the peculiarities of his method, and the general character of his results, without wearying the reader with the details of an abstruse system, which could not be made intelligible without prolonged discussion. I have already explained this necessary law of thought, that we can determine an object, or know it to be what it is, only by distinguishing it from what it is not. Thus we can know the color red to be red, only by distinguishing it from blue, green, or some other color different from red. This law of thought is to be kept in mind with reference to all that follows. Observe also the *method*, a combination of the analytic and synthetic methods, and the complement of the law of thought just mentioned, whereby, beginning with a single and indeterminate datum of consciousness,

Fichte resolves it into two opposite or contradictory notions or judgments, and then, by a higher act of synthesis, reconciles this contradiction, and unites the two opposites into a richer and more determinate notion. Then, repeating the analysis of this last result into two other opposites, another synthesis of these produces a still higher cognition; and so on indefinitely, thus constructing *a priori* the whole fabric of science out of a single fundamental principle, instead of collecting empirically, like Kant, all the data and categories, and setting them down in mere juxtaposition. This is the method of Thesis, Antithesis, and Synthesis, which Hegel soon borrowed from Fichte, improved and developed it as the immanent logic of the Idea, and made it the keynote, indeed, of his whole metaphysical system. It may be not inaptly symbolized by a magnetic iron bar, with its north and south poles, and point of indifference half way between them. Break this in two at its central point, and forthwith you have two magnets, each complete, with its opposite poles and indifferent centre. Hence this method has been called by some "polar logic." It really depends upon this curious law of thought, that two contradictories, like any two correlative terms, are really grasped and apprehended by *one* act of thought; and this for a good reason; because what is really thought in such a case, is, not the two terms, but the one relation between them. Thus, we may draw two straight lines, not parallel to each other, on the blackboard, and we cannot tell whether they are convergent or divergent. Really they are both; yet the two terms are contradictories. In like manner, a curved line is both convex and concave, though these two terms contradict each other. I dwell on this curious law of thought, because he who understands it has taken a long step towards understanding Fichte, Schelling, and Hegel; and, I may add, if he fully understands it, towards refuting all three.

But to return to Fichte: as yet we have only the absolute Ego, indeterminate, that is, not defined or limited by any attribute whatsoever, but which exists merely by affirming its existence; and this gives us the category of *being*, or *reality*, though not yet distinguished from any other being, so that it is only "being in general," or in the abstract. This Ego, existing only by an *act* of self-affirmation, is nothing but pure and infinite *activity*; — "infinite," I say, because not as yet limited or restrained by any other being whatsoever. As the first exertion of this activity, and likewise as the first step towards self-determination, the Ego posits, or affirms the existence of, another being or activity over against

itself, which is not itself, and therefore is a Non-Ego. At first, I only know *that* I am; but I begin to know *what* I am, as soon as I can distinguish myself from something which I am not — that is, from a Non-Ego, a Not-Self. This can be logically done; for the judgment "I am I" gives, by the well-known logical procedure, contraposition through infinitation, this other judgment, "I am not not-I." Stated more simply, "I am not not-I," the second fundamental principle of the *Wissenschaftslehre*, is an immediate and perfectly logical inference from "I am I." This second affirmation, therefore, is just as absolute or unconditioned as the former one. But observe that it is unconditioned in Form only; not in Matter, for the Non-Ego is posited by the Ego, and can be known only under condition of knowing the Ego: — just as "not-red" can be known only through what "red" is, — "invertebrate" only through "vertebrate." Already, then, we have Idealism, or rather Egoism, firmly established; for the Non-Ego is, so to speak, only the creature of the Ego, can be known only by knowing the Ego, is thus dependent upon the Ego, and, in fact, cannot be cognized at all except as the opposite or contradictory of the Ego. According to the logic of contraposition, whatever belongs to the Ego, the contradictory of it *must* belong to the Non-Ego. The universe and God, for instance, are only forms of the Non-Ego, and, as such, are but developments or creations of the absolute Ego, which is the principle or beginning of all things, explaining all, affirming all, creating all. The story is told of Fichte informing his class that, in the next lecture, he should show how the Ego creates God.

We now have two fundamental principles, a thesis and an antithesis, the Ego absolutely posited, and the Non-Ego absolutely *op*posited, the latter being obtained by a process of analysis, or self-diremption, from the former. But they contradict each other, and we need a third fundamental principle, to make a synthesis of the two, in such a manner as to cancel their opposition, and resolve the two into a higher notion. As yet, the two are opposites, so that they cannot exist together. If we posit the one, we sublate the other. If an absolute Ego exists, there cannot be a Non-Ego; and if we assume an absolute Non-Ego, we destroy the idea of the Ego. How can being and non-being, reality and negation, be thought together without mutual destruction? They must mutually *limit* each other. But in *limitation*, the category of *quantity* is already implied; for *to limit* anything is to deny the reality only of a *part* of it, not of the *whole;* we deny a part of

it, we affirm the other part. Therefore, the notion of *limit* includes in itself, and so reconciles, the notions of reality and negation, (thus completing Kant's second table of Categories, Reality, Negation, and Limitation,) and also includes the idea of *divisibility*. In this manner arises our third fundamental principle, expressed in this formula: "In the Ego, I oppose to the divisible Ego a divisible Non-Ego." Now the two opposites are identical *in a portion* of their marks or attributes, so that they no longer wholly contradict each other; on the other hand, there is ground for distinguishing the two, inasmuch as each has some marks or attributes which are not possessed by the other. Of course, as each becomes limited, it ceases to be absolute; but so far as it is limited, it becomes determinate, and thereby knowable. *Omnis determinatio est negatio.* I begin to know what I am, as soon as I know what I am not; but as soon as there is anything which I am not, I cease to be absolute. Thus, I know at least one attribute of myself, namely, spirituality, when I know that I am not matter. Here the Non-Ego limits, and thereby determines, the Ego. On the other hand, by this same act, I begin to know *matter*, as it now appears that it is not *mind*, or *spirit;* and so far as it is thus known, the Non-Ego is limited and determined by the Ego. So far as *you* and *he* are represented in my consciousness, you are a part of my Non-Ego; an imaginary or ideal Non-Ego, observe! For all the Non-Ego merely exists and is developed by the Ego. But so far as I distinguish myself, though only in thought, from *you* and *him*, I know myself better as a determinate personality, as one man among other men. I enter the world of phenomena as soon as I leave, in thought, the realm of the Absolute. But it is only a phenomenal and unreal, an ideal, world; for you, and he, and all other outward things, are only phantoms in my imagination; and when philosophy brushes away this universe of shadows, my personal being falls back into the Absolute, the one and all, the universal Mind.

It is unnecessary to pursue the development of the theory farther. The third fundamental principle again resolves itself, on analysis, into these two contradictory propositions: 1. The Non-Ego determines or limits the Ego; 2. The Ego determines or limits the Non-Ego. According to the former, the Ego appears as passive, as acted upon; and so far as its thoughts are shaped and modified by impressions made upon its senses from the phenomenal world without, it is cognitive; and, therefore, this is the principle of theoretic knowledge. According to the latter, the

Ego determining the Non-Ego, the Ego is active, and the Moral Law, an element of its own consciousness, which does not come to us from the world without, but from our own inmost being, becomes the law of the universe. The former principle creates Science; the latter generates Ethics. Any one can build up a system of both by the method of the polar logic. The development of the theoretic and cognitive principle need not here be carried farther; and we may be satisfied with a very brief consideration of the peculiarity of Fichte's ethical doctrine.

In his conception of the grandeur and independence of the Moral Law, and in the rigor and severity of his application of this Law to the heart and the life, Fichte equals, and perhaps surpasses, Kant. In order to create knowledge, as we have seen, the Ego imposes limits upon itself, and conjures up an object, the Non-Ego, for the very purpose of restricting and determining its own activity. So far, then, it is finite and dependent. On the other hand, just so far as the Ego is the Absolute, creating itself through the very act of affirming its own existence, it is *causa sui*, and therefore infinite and eternal. Consequently, at the same moment, the Ego is both dependent and independent, both finite and infinite, both determined by the Object, and itself determining and restricting that Object. We cannot reconcile this contradiction by putting aside the Object altogether; for, as intellect, the Ego needs to be thus limited. It needs something outside of itself, an *Anstoss*, by impinging on which it may be awakened to definite consciousness. Then its only resource is, to recognize the existence, indeed, of the external Object as limiting, but also to assert its own original freedom and spontaneity; that it is not *absolutely* limited by any Object whatever which is not its own creation; and hence, that it has power in itself to go beyond any given limit, and to overcome all restraint. Because the Object never entirely disappears, the Ego always finds a resistance opposed to it, and therefore its own pure activity is always a striving and an effort. Yet this resistance is not absolute at any point, but is only partial, since it never entirely controls our activity; while the striving from within is infinite, is renewed after any failure, being an impulse that constantly regenerates itself. The purpose of this striving, this impulse, speaking generally, is to bring about a conformity of the Object with the Ego, by overpowering the resistance which the former offers to the pure activity of the latter, and thereby enabling the Ego to act out itself, and so accomplish its own perfection. But since this pur-

pose can never be perfectly carried out over all obstacles, the striving is directed not towards the actual world, or the universe as it is, which is dependent on the activity of the Non-Ego, but towards the world as it would be, if all reality in it were absolutely created through and by the Ego; that is, it is turned to an ideal world and to acting in conformity to an ideal end and aim. When the Ego finds itself limited and hampered in this its effort, there arises in it a longing and an aspiration. If its action is conformed to this aspiration, there is created within it a feeling of contentment and self-approbation; if otherwise, it has a sense of uneasiness and discontent; the Ego becomes aware that it is at variance with itself. But since that feeling of self-content does not spring from the accomplishment of any definite external object, but depends upon the agreement and harmony of the Ego with itself, the ideal impulse has its end and aim within itself. It is an absolute impulse, or a longing and impulse for its own sake; or if we regard it as a law, it is an absolute law, a command which aims only to assert its own sovereignty; it is a Categorical Imperative.

Here, then, we reach the point of union between Fichte's ethical system and that of Kant, and it is not necessary to carry the exposition farther. The philosophy of the *Wissenschaftslehre*, both in its purely speculative principles, and in the theory of morals which is founded upon them, owes most of its interest and importance to the effect which it produced upon the subsequent course of speculation in Germany, and to the light which it casts upon the character and life of Fichte himself. Both Schelling and Hegel, with their numerous disciples and coadjutors, built in the main upon his foundations, worked by his method, and carried out to their remotest consequences the principles which he established. The logical filiation of doctrine which binds together the systems of these three great thinkers, together with their common obligations to Kant, forms an instructive chapter in the history of the natural development of thought. But the philosophy of Fichte seems to me still more attractive when it is regarded as a key to the story of his life. Harsh, abstruse, and forbidding in its outer form, it is warmed and lighted up within by the glow of intense feeling and conviction which was characteristic of the man. As perfectly as in Spinoza's case, his conduct illustrated his principles, his theory was the outgrowth of his character. He seems like one of the old Stoics in the loftiness of his aims, in the rigor of his thought, and in the severity of the demands which he made

upon himself and others; and better than any of the Stoics, he acted out what he professed. Pure reason, the logical evolution of abstract thought, dominated his whole being. His strong will, steeled in the school of adversity, placed itself unreservedly at the service of his intellect. No reference to the opinions or judgments of his fellow-men ever drew him aside from his fixed purpose, or made him falter in his efforts for its fulfilment; the allurements of interest or pleasure never affected his conduct. When he had once chosen his path, he followed it in the spirit of a fanatic or a martyr: to turn either to the right hand or the left seemed to him a dereliction of duty of which his nature was incapable. His public life fell upon the period of the greatest humiliation of Prussia, after the battle of Jena had prostrated her at the feet of Napoleon. In that dark day, Fichte bated not a jot of heart or hope, but was unremitting in his efforts to rouse the spirit of the people, and prepare them for the struggle which was sure to come in order to shake off the oppressor's yoke. No more eloquent voice than his was raised to stir the hearts of his countrymen for the great War of Liberation. His noble "Addresses to the German Nation" were delivered in the Academic theatre at Berlin early in 1808, and had much influence in kindling the popular enthusiasm for the contest. Fichte did not live to witness the final triumph. While attending the sick in the military hospitals, his wife, who was laboring in the same cause, contracted an infectious fever; and though she recovered, Fichte took the fever from her, and died on the 27th of January, 1814. It should be mentioned, that in his later publications, he considerably modified the character and tendency of his earlier speculative doctrines; and his philosophy, though resting, as he declared, on the same fundamental principles as before, became deeply infused with sublimated mysticism and moral enthusiasm.

CHAPTER XVIII.

The Philosophy of the Absolute: Schelling.

What strange consequences followed the promulgation of the Critical Philosophy in Germany! Kant intended by it to give a death-blow to all systems of metaphysics which profess to extend human knowledge beyond the bounds of the finite, the limited, and the contingent. He undertook to bring it all within the field of experience. He rebuked the arrogance of those who proposed to push their inquiries beyond the phenomenal world, and to reach the universe of things as they really are, in themselves, apart from their manifestations to sense. He thought he had accomplished his end, by an exhaustive analysis of all the knowledge which is within our reach, and of the nature of the human mind, pointing out thereby its necessary limits and imperfections, and the inevitable illusions and sophistries in which we are involved when we attempt to realize our Transcendental Ideas, and, through them, to know the supersensual, the infinite, and the absolute. All this he supposed he had accomplished by that rigorous method, strict logic, and unsparing criticism, which alone can satisfy the claims of science. To adopt the language which forms the title of one of his most important works, he thought he had laid down the indispensable "Prolegomena for every system of metaphysics which should hereafter assume to be considered as a science." In still loftier terms, he announced that "all metaphysicians are hereby formally suspended from office," until they shall have demonstrated how "synthetical cognitions *a priori*" are possible, and how they may properly be extended beyond the boundaries of experience. Thus he seemed to himself to have exorcised forever the phantom of transcendental metaphysics. And this far-reaching enterprise appeared for a time, even to others, to be successful. His Critical Philosophy, as soon as it became known, met with almost universal acceptance. Not only were his results acknowledged, but his principles and method, even his terminology, were adopted and copied; and, to a considerable extent, in all the schools of

Germany, as well as wherever speculative science has found a home, they reign paramount to this hour.

But how vain are the expectations of man! Kant had, as it were, thrown out a challenge to the whole thinking world, to comply with his conditions, and still to establish, on an inexpugnable basis, a philosophy which should transcend experience, and should reveal the secrets of the world which lies beyond the realm of flesh and sense. And within forty years after the publication of the "Critique of Pure Reason," three great thinkers, Fichte, Schelling, and Hegel, two of them at least within Kant's own lifetime, had taken up his gauntlet, and worked out, each in his own way, and in full compliance, as it seemed, with the severest conditions of science, a complete Philosophy of the Absolute. Perhaps I ought to add a fourth name to the list, that of Arthur Schopenhauer, a man of greater literary ability than either of the illustrious three just mentioned, certainly more arrogant and offensive in his tone than they, and whose metaphysical system, first published in 1819, though overlooked or neglected for many years, at last forced its way into general notice and reputation shortly before the author's death, and is now admitted to a front rank in the philosophical literature of Germany, the richest in this department of all the countries in the world. Four Philosophies of the Absolute, each of great note and importance, and numbering a vast crowd of disciples in its day, within forty years of the time when Kant solemnly announced that he had demonstrated any such science to be impossible. And since the time of Aristotle, the man has not lived who had a better right to put forth so lofty a pretension than Immanuel Kant.

In the last chapter, I endeavored to present an outline sketch of the earliest of these systems, that of Fichte, published within thirteen years after the appearance of the "Critique of Pure Reason." Before passing to the next, that of Schelling, it may be well, by the aid of what we have accomplished, to attempt to form as clear an idea as possible of what is meant by a "Philosophy of the Absolute." As we can thoroughly determine what a thing is only by showing what it is not, let us begin by contrasting such a philosophy with its opposite, the doctrine of Empiricism.

He who makes experience his only law and guide begins and ends with facts; that is, with what is most particular and concrete. These he proceeds to analyze, classify, and reduce to system and law, these words being only expressions for generalized facts. Thus, his course is always upward, from what is most particular and

determinate, from individual phenomena seen now and here, up to the loftiest generalizations, even, if you will, to ultimate principles; though, properly speaking, his science admits nothing as ultimate, but always leaves room for corrections to be obtained from further experience. Thus, he accepts nothing as absolutely certain, or definitely determined; nothing as absolutely simple or one, because subsequent analysis may resolve what now appears as the most refractory element into its constituent parts; nothing as a totality, or absolute whole, because nicer or more extended observation may add new links to the series; nothing as an absolute beginning or an absolute end, because later inquiry may always disclose something which lies beyond. Thus empirical science is always inchoate and imperfect, even glorifying itself on these shortcomings, because it thereby leaves the road open for *progress*, or at any rate, for subsequent effort. But corrections and extensions of the theory, like the materials for its original construction, can be drawn only from the storehouse of nature, that is, from the observation of facts. Empirical science often reasons downward, or deductively, it is true; but never from first principles; always from maxims which express former generalizations of experience. It never aims to go behind the facts, and therefore never seeks for a First Cause of them, nor for a Final Cause, or the purpose *why* they exist. It deals only with secondary causes, or physical laws; with relative, not absolute, antecedents; with phenomena, or what appears, not with noumena, or what really is; with the actual consequents of phenomena, and not with any purposes which they were intended to subserve. It does not seek to penetrate the mysteries of existence, or to explain how things began to be, or why they manifest themselves thus, rather than otherwise.

Now the briefest explanation which can be given of the Philosophy of the Absolute is to say, that it is the direct opposite of Empiricism in every one of the particulars just mentioned; and perhaps this is as good an illustration as can be found of the truth of the old scholastic adage, *omnis determinatio est negatio.* Instead of beginning with the particular, the concrete, and the determinate, it aims to start from what is most universal, most abstract, and least determinate. Instead of rising from facts to laws, and from these to principles, it endeavors to posit, first of all, a *principium principiorum*, an absolute first Cause, absolute unity, absolute totality, the Infinite and the Absolute, universal substance, absolutely indeterminate existence, all in one; and from this absolute commencement to unfold and develop, step by step, all degrees and varieties of

acttual and determinate existence in the universe of thought and of real being. We need not be surprised, then, to hear Hegel declare that the Philosophy of the Absolute, as taught in his Logic, is "a representation of God as he was in his eternal essence, before the creation of the world or of a finite spirit;" as "all things were made by Him," and "He is before all things, and by Him all things consist." Having obtained or assumed this absolutely first principle, thus wholly indeterminate, the problem is, to trace the *necessary* and continuous development from it of all modes of determinate existence and determinate thought, thus explaining how all things began to be, and why they appear under the respective phenomenal forms in which they now manifest themselves to consciousness.

Thus, even Cartesianism is a sort of crude and imperfect attempt to construct such a philosophy; for, beginning with the single datum, which skepticism itself cannot doubt, namely, pure thought, or thought in the abstract, it endeavors to deduce from this, successively, the thinker's own existence, the being of a God, the trustworthiness of our faculties, and hence the universe of things as actually known, and in which we live. But the attempt was a lame one; for after taking successfully the first two steps, thought and the thinker, Descartes unwittingly introduces an empirical element, a mere fact learned by internal observation, namely, that among other ideas in the thinker's mind, there is one of an infinite and perfect Being; and from this idea *as an effect*, he reasons upward, after the manner of the Empiricists again, to the actual existence of such a Being. Spinoza, resolved to be more rigorous in his logic, adopted all the forms and precautions of pure mathematics, and therefore set out with a definition, an arbitrary one, of an abstract idea, universal Substance, as that which exists and is conceived in and of itself, and therefore does not need a prior conception of anything else. As this definition is so framed as to exclude in the outset all individual and real objects, and as in the evolution of the system from this one principle every empirical datum is carefully excluded, Spinoza's conclusions, of course, turn out to be just as arbitrary and unreal as his premises. His theory of pantheism is the rigorous logical development of a mere phantasm of his own thought, having no connection or similarity with the phenomenal world actually present to sense and consciousness, the genesis of which it was his duty to explain.

Fichte was more consistent than Descartes, and had a clearer apprehension than Spinoza of the nature of the task which lay

before him; for he enjoyed the great advantage of beginning his work after Kant had carefully distinguished and laid down the conditions of the problem. I think the *Wissenschaftslehre* is, on the whole, more complete and systematic, more severely reasoned out and faithfully tracked to its remotest consequences, than any Philosophy of the Absolute which the wit of man has ever devised. It is not so poetical a system, not so gorgeously set forth with all the eloquence and illustrations which a glowing imagination could supply, as that of Schelling. It is not such a miracle of ingenuity and depth of thought, of minuteness and comprehensiveness combined, as that of Hegel. But it is more frank and simple, so to speak, than either; it is more faithfully traced out to its legitimate and inevitable conclusions. Instead of attempting to deduce every thing from an *idea*, which, because wholly indeterminate, is indefinable, and therefore equivalent to zero, Fichte began with the Ego positing itself, or affirming its own existence; and thus secured an indefinite and consequently unlimited activity, an absolute and infinite Ego, wherewith to explain the secret of creation. Still, the actual evolution of a real universe of determinate beings from such a blank conception of pure activity, the mere phantom of a God, remained just as incomprehensible as ever. There is nothing to determine why this absolute Ego, this pure activity, should be developed into one form of determinate existence rather than any other, should create *this* world instead of any conceivable universe, or no universe at all. It is merely the x of an insoluble equation, a pure activity out of relation to anything, and so out of relation to any conceivable product, or to any one form of existence more than to any other. Hence, Fichte is still driven to the usual subterfuge of these philosophers of the Absolute. Unable to explain the creation of a real universe, of actual finite beings, such as we are, he resolves existence itself into a mere dream, and all finite and determined being into a mere shadow of the Absolute. The Ego is then supposed to spin an imaginary Non-Ego out of its own thought, a still dimmer reflection of its own shadowy existence, and against this unreal background, becomes itself the poor spectre of determinate and individual being. These system-mongers succeed in explaining the process, only through denying the fact, of creation.

The philosophy of Kant and Fichte represented the destructive tendencies, the deification of pure reason, the moral enthusiasm, and the lofty hopes which characterized the first French Revolution. The enthusiasts of that period hoped to build a new world

out of the ruins of the past; to demolish all existing institutions, and to create new forms of society, in which truth, freedom, and justice should prevail. They rejected all that was positive and traditional in society and the State, in religion and morality, while they deified individual freedom. The subjective and rationalistic methods of the Critical Philosophy, the theory of the *Wissenschaftslehre*, in which the universal Ego, as pure activity, asserts its own freedom in limiting and determining the Non-Ego, the world without, which is its own creation and thus its subject and vassal, harmonized with these revolutionary movements, and aided in completing them. But a reaction soon began in Germany, where those who dreaded change sought refuge in the traditions and institutions of the past, inculcated reverence for a higher authority than that of man, and a mystic recognition of the unseen agencies which direct the course of nature and history. The religious sentiment, offended by the negative results of Rationalism, clung all the more firmly to its positive belief, and Catholicism raised a victorious reaction against the Protestant principle, so that some of the most distinguished names in German literature, such as Görres, Haller, Friedrich Schlegel, Müller, and Hardenberg (Novalis), became proselytes to the Romish church. Poetry also found inspiration and materials in the consecrated traditions of the past, in the mysteries of nature and of the human mind; and thus was formed the Romantic school in literature, to which the poets, Tieck, Novalis, Schlegel, Stolberg, and others belonged. The arts also, and to some extent the sciences, followed the same direction. Painting, sculpture, and architecture looked for guidance to the remains of mediæval art, and for inspiration to the fervent Catholicism of earlier times. Historians turned their inquiries from the recent to the more remote past, to the Middle Ages, with their stories of miracles and legends of the saints, and even back to hoary antiquity, and the primitive religious systems of the East. The rapid progress which the physical sciences were then making also tended to develop this taste for the recondite and the marvellous. While observation and experiment were heaping up new and marvellous facts, philosophy attempted to give unity and system to these facts by interpenetrating them with speculative ideas, and thus to bind together the *disjecta membra* of nature into a living organism. Most interesting among the recent discoveries were those which concerned the mysterious phenomena of electricity and magnetism. Chemistry, which was then making rapid progress, seemed to throw new light upon the internal operations of nature and the mutual play of its secret formative agencies.

All this tended to correct the morbid tendency to introspection and Idealism which characterized the school of Kant and Fichte. Instead of regarding the Ego alone as real and active, and even as the Absolute itself, the Non-Ego, or the whole outer world, existing merely in idea, and imagined for no other purpose than to render the Ego more determinate, by setting up over against it a phantom from which it could be discriminated in thought, — instead of this subjective and egoistic theory, I say, there was a reaction towards the objective pantheism of Spinoza. Instead of making outward nature to be the mere creature of human thought, the tendency now was to absorb man into nature, and to regard his individual existence as lost among the countless phenomena, the myriad developments, of the mighty mother, the universal Substance, the One and the All. This new turn of speculation, however, was not in the direction of Materialism; far from it. Nature was still ideal, still a mere creation of universal thought or manifestation of the Absolute. But Nature was now viewed objectively, as one organic whole, independent and self-sustained, a system of forces and agencies necessarily acting upon and limiting each other, yet all derived from one source and working by one law. Individual mind was but one bubble floating on the surface of this resistless current, and driven round in its eternal vortices. Realism became the passion of the day, and a sort of pantheistic worship of the outer world and sensible nature was substituted for the fanatical Egoism which inspired the system of the *Wissenschaftslehre*. Among the poets, Goethe perhaps best set forth this realistic and objective aspect of nature, whilst Schiller was still absorbed in dreamy and enthusiastic idealism.

Schelling was a precocious genius, the boy-Plato of Germany, who achieved eminence as a great metaphysical thinker while he was still a youth at the university. He had the fervid imagination and lively fancy of a poet, rather than the critical understanding of a philosopher. He was a great master also of varied and ornate disquisition in lofty and eloquent prose, richly illustrated by a wide range of reading and considerable acquisitions in science; and he thus fascinated and warmed his hearers, even when his turn for mysticism considerably obscured the connection of his thoughts. He published two remarkable philosophical treatises in 1794–1795, before he had left college, and when he was as yet only twenty years old. In these he appeared as still a disciple of Fichte, though aspiring rather to amplify and correct, than merely to expound, the doctrines of his master. But he soon worked himself

free from this dependence, and, both in his lectures and other publications, began to teach a philosophy which no other person than himself was capable of originating. His system passed through no less than five successive stages, varying widely in the course of its development, so that it is impossible to give any self-consistent view of it as one whole. His life, also, presents two distinct periods of great literary activity, separated from each other by a long interval. Before he was thirty years old, that is, before 1805, he had published all the works on which his fame really depends, and achieved through them a world-wide reputation, his theories largely coloring not only the metaphysic thought, but also, to a considerable extent, the physical science, of all his German countrymen. Then, though continuing to hold high academic position at Munich and Erlangen, his literary activity seemed to come to an end, and he maintained an almost unbroken silence for over thirty-five years, the very period during which his great rival, though former associate and intimate college friend, Hegel, was developing his system of metaphysics, and through that, and subsidiary publications, was making himself a power in the state, and exercising an influence, not only in philosophy, but in history, politics, and theology, such as hardly any mere speculatist has equalled for more than a century. Coldly and silently Schelling stood aloof, and made no sign, while Hegelianism was running its brilliant but short-lived career, agitating all North Germany, and thereby affecting the course of thought throughout civilized Europe. At length, in 1841, nine years after the death of Hegel, Schelling emerged from his retirement, accepted Hegel's vacant post as professor of philosophy at Berlin, and, amid the generally excited attention and expectation of the whole public, began to lecture again with all the enthusiasm, eloquence, and fertility of his youth. Thus, to adopt Hartmann's striking figure, Schelling was the morning star which heralded the uprising sun of Hegel; and also the evening star, which continued to shine on after that sun had set. Still, the high expectations of those who had called him from his retirement terminated generally in disappointment. Those who heard him, indeed, were fascinated by his eloquence; but they brought away very obscure notions of a mystic theogony and cosmogony, which were substituted for the more definite metaphysical speculations in which his youth delighted, and on which his fame chiefly depends. These lectures of his old age were published after his death in two or three bulky volumes; but I fancy few persons have had courage enough to read them through. The philosophy of his earlier

days is all that I shall undertake to consider, and this only in a cursory manner.

Schelling's poetical imagination, and his interest in the creations of art and the phenomena of outward nature, felt the full force of those influences which I have described as constituting, at the beginning of this century, a reaction against excessive Idealism and Egoism, and as leading to a sort of dreamy worship of external nature and mystic absorption into it. Through Coleridge, who knew enough of Schelling to pilfer some of his thoughts, though not enough to understand him as a whole, these influences were imported, so to speak, into English literature; and they constitute the very spirit and essence of that portion of the poetry of Wordsworth which belongs to this period, and which is pantheistic throughout. From him I might quote almost at random in confirmation of this remark: —

> "To him, the meanest flower that blows could give
> Thoughts that do often lie too deep for tears."

And again: —

> "The sounding cataract
> Haunted me like a passion; the tall rock,
> The mountain, and the deep and gloomy wood,
> Their colors and their forms, were then to me
> An appetite; — a feeling and a love
> That had no need of a remoter charm
> By thought supplied, or any interest
> Unborrowed from the eye."

And still more directly expressive of the objective pantheism of Schelling, we hear him say or sing: —

> "I have felt
> . . . . a sense sublime
> Of something far more deeply interfused,
> Whose dwelling is the light of setting suns,
> And the round ocean, and the living air,
> And the blue sky, and in the mind of man;
> A motion and a spirit that impels
> All thinking things, all objects of all thought,
> And rolls through all things. Therefore am I still
> A lover of the meadows and the woods,
> And mountains; and of all that we behold
> From this green earth; of all the mighty world
> Of eye and ear, both what they half create,
> And what perceive; well pleased to recognize,
> In nature and the language of the sense,
> The anchor of my purest thoughts, ... and soul
> Of all my moral being."

True, Wordsworth has carried this "worship" of nature to an

unreasonable and ridiculous excess, and fallen into "dizzy raptures," not only over what is beautiful and grand in the outward world, but over many low and paltry objects, which no poetry can elevate above their intrinsic meanness and vulgarity. Thus, in one of his walks, he sees

> "A crowd, a host, of golden daffodils;
> Beside the lake, beneath the trees,
> Fluttering and dancing in the breeze."

He tells us that

> "I gazed, and gazed, but little thought
> What wealth the show to me had brought."

And he concludes, in the very jingle of Mother Goose, —

> "And then my heart with pleasure fills,
> And dances with the daffodils."

Still more curious is the influence of Schelling's Philosophy of the Absolute on the physical science of his own day, and even of these later times. In respect to the poets, it may well be, that of the realistic and pantheistic tendencies which they began to manifest some seventy years ago, Schelling's metaphysics were not so much a cause as an expression and exponent. There was a common influence at work, both upon him and upon them. Not so in physical science, in which he was to a great extent an inspirer, if not a teacher, even an originator of novel doctrines which opened lines of research and inquiry heretofore untried. He taught the physiologists and naturalists of Germany, instead of merely accumulating facts of observation, to arrange them into systems at least provisionally true, under the guidance of what might seem to be purely fanciful speculation. Oken and Agassiz were only the most conspicuous among a crowd of men engaged in similar pursuits, who, in their earlier years, were pupils of Schelling, and derived from him not only inspiration, but pregnant hints of what they afterwards worked out in detail. I suppose the modern doctrines of the Metamorphosis of Plants, or Vegetable Morphology, of the Homologies of the Skeleton, of the plan of God in the animal kingdom, and even of the Darwinian hypotheses of the Origin of Species and Pangenesis, may be traced very directly to Schelling's Philosophy of the Absolute. All these theories or hypotheses, call them what you please, are not *facts*, but *ideas* about the relations, the arrangement, and the genesis of facts. Strictly speaking, they do not belong to Zoölogy, which is

the science of living things as they now are, actually manifested to sense, but to Cosmogony, or the doctrine of the origin of things.

In proof that the germs, at any rate, of all these theories are to be found in Schelling, I will quote, not Schelling's own words, which could only be done at too great length, but the words of Schwegler, one of the best of his German expounders and critics, who, in the passage cited, has no reference to the point which I am now seeking to establish, but is merely abbreviating and explaining his master's doctrine.

"Organization," then, Schelling teaches, "is just as original as matter. Inorganic nature, as such, does not exist. It is actually organized, and is, as it were, the universal germ, out of which organization proceeds. The organization of each body is but the internal evolution of the body itself; the earth, by its own evolving, becomes animal and plant. And yet the organic world has not *formed itself* out of the inorganic, but was, at least potentially, present in it from the beginning. What now lies before us apparently as inorganic matter, is the residuum of the organic metamorphosis, — is what was unable at the first trial to become organic. The brain of man is the highest result of the whole organic metamorphosis of the earth. It will be seen, then, that we maintain the internal identity of all things, and the potential presence of all in all; wherefore we regard the so-called dead matter as only a plant-world, and an animal-world, asleep; a world which, at some future time, the absolute identity of its essence with what has gone before may possibly animate and awake to a new phase of life."

Again, he says, "matter and mind, exhibiting the same conflict of opposed forces, must themselves be capable of union in a higher identity. There is the same Absolute in nature as in mind, and their harmony is no mere reflection of thought. If you maintain that it is we who only transfer this idea to nature, then never upon your soul has any dream dawned of what, for us, nature is and should be. Nature shall be the visible soul, and soul the invisible nature. Nature appears thus as the counterpart of mind, and produced by the mind; only that the mind may, through its agency, attain to a pure perception of itself — to self-consciousness. Hence the series of grades or steps in nature, in which all the stations of intellect, on its way to self-consciousness, are stereotyped. For this reason there is something symbolical in every thing organic; every plant is a corporealized throb of the soul. The main peculiarities of organic growth, intussusception, or self-

formation from within outwards, adaptation of means to ends, variety of interpenetration of form and matter, are all so many leading features of the mind. As in the mind there is an infinite effort towards self-organization, so also in the external world a similar tendency must display itself. The whole system of the universe, therefore, is a species of organization, formed from a centre outwards, and rising ever from lower to higher stages."

According to that law of thought which I have often cited, the knowledge of opposites or correlatives is one, because what we really think in such cases is, not the two terms, but the relation between them, which, so far as they are contrasted with each other, is the essence of both. Hence, as has been well remarked, "when we say Finite and Infinite, Real and Ideal, Time and Eternity, Absolute and Relative, Conditioned and Unconditioned, Mind and Matter, etc., we divide the one object of our thought; each term is the correlative and complement of the other, and we understand it only through distinguishing it from that other. But there must be a higher unity, which contains both terms of the idea; a reason which makes it possible to think them both in one; and this is what metaphysicians call the Absolute." It is at once their producing cause and their essence, the common root whence these opposites spring. The broadest and clearest distinction between the Relative and the Absolute is, that the former is, and the latter is not, subject to the Principle of Sufficient Reason, that is, to the question *Why?* which involves its relation to some other phenomenon. Hence we cannot directly know or be conscious of the Absolute as such; for knowledge or consciousness necessarily involves the relation between the act of thinking and what is thought of, between Subject and Object. The Absolute, therefore, is inconceivable as such; but the necessity of its existence or reality, — the mere fact *that* it is, — may be indirectly apprehended by logical inference, or, as Schelling would have it, by intellectual intuition, by falling back behind consciousness. Here, as I have already said, Schelling's system begins to diverge from that of the *Wissenschaftslehre.* Granted, that Being is the product of Thought, or in other words, that the Non-Ego exists only in and through the Ego; the converse proposition is equally certain, that Thought is evolved from Being, that the Ego is a product either of the Non-Ego, or, of a common element in which the two are one. In the first moment, argues Schelling, in which I become conscious of myself, I perceive the external world as already existing by the side of me, and only by distinguishing my-

self from it, can I become aware of my own existence. Hence, before the dawn of consciousness, before consciousness becomes possible, Nature must already have been constructed unconsciously, must have been spontaneously self-evolved by the Absolute, which is the common ground both of the Ego and the Non-Ego.

The relation in which Schelling stands to other philosophers, as well as to Fichte, is easily conceived and expressed. The Idealists identify matter with mind; the Materialists identify mind with matter; Schelling identifies these two forms of identification with each other, and therefore properly calls his system the Philosophy of Absolute Identity. His "Absolute" is the undivided unity of Subject and Object, of Thought and Being. The system of Fichte, as I have shown, was based in the main upon the fundamental principles of Descartes; and in like manner, Schelling, though he works by a different method, is in great part a reproduction of Spinoza. The phenomenal world both of matter and mind is resolved, in the one case, into a vague abstraction, that of universal Substance, and in the other, into an inconceivable background of real being, called the Absolute.

At whatever point a Philosophy of the Absolute may begin, it must soon abut upon that inevitable antithesis of thought, or Duality of Consciousness, as Hamilton calls it, which may be variously expressed as the Ego and the Non-Ego, Subject and Object, Mind and Matter, Spirit and Nature. As this Philosophy seeks for absolute unity in all things, for a seminal first principle, or absolute God, *one* in his eternal essence, from which, or from whom, all the seeming variety and multiplicity of the phenomenal world may be deduced or derived, the first problem presented to it is, How to resolve this apparent Duality into Unity. This is no easy task; for no sooner does the Philosopher *think* he has accomplished it, than the old difficulty inevitably reappears; for it results from the very nature, the necessary limitations, of human, and therefore finite, thought. When I attempt to think or conceive this absolute unit, it becomes the Object of my thought, and thereby is distinguished from, and set over against, the Subject thinking; and therefore it ceases to be absolutely one and all, for it coexists with the Mind that conceives it and strives to contemplate its essence. The difficulty is inevitable, for human thought itself depends upon this antithesis between the Subject knowing and the Object known. Then the Absolute of my thought is not the true Absolute; since the former exists only as one member of a Duality; all *other* things may be developed from it; but there

is one thing which it cannot generate, and which is at least co-equal with it; and that is, the thinking Mind by which it is itself conceived. Hence, sooner or later, a Philosophy of the Absolute always takes the form of Idealism.

The doctrine of the *Wissenschaftslehre* is, that the Ego is the true Absolute. At first, this Absolute Ego cannot be conceived as such, or as Absolute; for since it is (at the outset, or before the creation even of an imaginary world) both One and All, and All in One, there is nothing from which it can be contradistinguished, and thereby *thought*. But though inconceivable, it can act; and it does act; first, by positing itself, or affirming its own existence, and secondly, by positing a fictitious Non-Ego, an unreal world, existing outside of itself. It is, therefore, first apprehended as pure and unlimited activity, exerted with perfect freedom; and then as the product of that activity, since there cannot be action without an agent. Then it creates an unreal Non-Ego, a phantom universe, peoples it with imaginary human beings, and thereby becomes conscious of itself as a determinate individual existence, so far as it is discriminated from these spectres, which are its own creation. In fact, therefore, I am not myself as a determinate individual, but I am only one manifestation of the Absolute. Thus, Fichte's philosophy is Idealism first exaggerated into Egoism, and then sublimated into Pantheism, or rather Nihilism, which is the usual conclusion of a Philosophy of the Absolute.

Schelling argues at length, and with much acuteness and subtilty of thought, against the Fichtean system. He objects, that the action of the Ego, in setting up over against itself an imaginary Non-Ego, cannot be regarded as the result of pure spontaneity, exerted with perfect freedom. The most resolute Idealist, he says, cannot avoid considering the Ego as dependent, that is, as *constrained* to form at least a mental picture of the outer world; for there is only too much in this world which the Ego, had it been free, would have constituted otherwise. The necessity to which it is thus subjected is an internal and blind necessity, not proceeding from any conscious exercise of the will, but grounded in the inmost nature of the Ego. Nothing hinders me from going back in thought, therefore, with this Ego, which has now become conscious of itself in me, to a preceding moment, when as yet it was not conscious; and from assuming the reality of something lying beyond the now existing consciousness, and of an activity previously exerted, of which I become aware only through its result. This activity cannot be anything else than the labor of com-

ing to one's self, the very act of first becoming conscious, which is therefore not known in itself, but only in its consequence. This mere result or consequence, which alone is present to consciousness, is that very mental picture of an outer world, which the Ego cannot regard as produced by itself, for it existed simultaneously with the Ego, and afforded the only means through which the Ego could first become self-conscious. This inseparable union of myself with the necessary presentation of a universe external to myself, says Schelling, was the fact which I sought to explain through a transcendental past existence, preceding the origin of empirical consciousness. For I first know that I am through the act of coming to myself; and this coming to myself implies a preceding and unconscious state, out of myself, from which I came. The first condition of the Ego, therefore, is a state of being outside of its proper or individual self. Because it comes from a region lying behind or above consciousness, it is not yet the individual Ego; but it first becomes individual, and thereby self-conscious, through the act of coming to itself. Therefore, the state lying outside of consciousness, and preceding the affirmation that I am, is one and the same for all human beings; it is the one universal Substance of Spinoza. Only when it emerges from this primal and unconscious state of being, does it first become in every one *his* Ego, his *individual* Ego, because it then first comes to itself, and distinctly says, I am. Certainly, when it first becomes capable of this utterance wherewith its individual and separate life begins, it no longer remembers the road which it has traversed in order to reach this goal. Since self-consciousness first appears at the end of the journey, it must have passed over the whole route unconsciously, and without knowing it. The individual Ego holds in mind only the monuments, as it were, the faint mementos, of the road which it has passed over, but remembers not the road itself. And for this very reason, it is the duty of philosophy to reconstruct the forgotten past, and enable the mind to recall its previous history. The Ego must be enabled consciously to retrace its whole unconscious progress, from the beginning, when it was not as yet separated from universal and indeterminate being, up to the close, when it first became self-conscious. In so far, Philosophy is nothing else than *ἀνάμνησις* — a reminiscence of what it has done and suffered in its universal and pre-individual state; a result which harmonizes well enough with the well-known doctrine of Plato.

We can now see, that, as the doctrine of Fichte is closely allied

with that of Descartes, being, in fact, little more than an abbreviated German version of *Cogito, scilicet sum*, so the Philosophy of Schelling is in the main a mere reproduction of Spinoza. Alike in his premises and in his results, Schelling repeats the work of his Jewish predecessor. By mere definition, that is, by an arbitrary assumption, Spinoza holds that "the Absolute," in which all things are fused into one, is universal Substance, illimitable, indeterminate, and eternal, all individual phenomena, whether of extension or thought, being only its transitory modes or affections. In a similar manner, Schelling teaches that "the Absolute" is an inconceivable centre and source of being, lying behind consciousness, and manifesting itself solely through its opposite poles, Subject and Object; and according as the one or the other of these predominates, Matter or Mind in various degrees becomes apprehensible. In order that "the Absolute" thus conceived, or thus left inconceivable, may not seem to be an arbitrary invention, he is obliged to contrive a new mental faculty, that of intellectual intuition, which only artists and men of genius are endowed with, and which is competent spiritually to discern what lies far beyond the reach of consciousness, namely, the identity of Subject with Object, and thereby of One with All.

Obviously, then, Schelling's ambition was to reverse the Fichtean process, and to reëstablish the Non-Ego in its dignity and rights, by developing the Subject from the Object, or Spirit from Nature, instead of the converse. But here a difficulty immediately arises. The Non-Ego does not affirm its own existence by positing itself. As Nature without Spirit, as Object independent of a Subject, it is both dumb and inert. Chaos is voiceless and inactive, a mere waste of waters, before the spirit of God moves over the face of the deep. Hence Schelling was forced to adopt the theory, that both the Ego and the Non-Ego are merely phenomenal manifestations of the true Absolute, which lies behind or beneath them, and which develops itself by a constantly repeated process of self-diremption, forever splitting itself into two opposite poles, and thereby successively rising into more distinct degrees of difference and Self-Consciousness, and into higher stages of being. Polar logic, the grand invention, the universal method, of this class of metaphysicians, is again pressed into the service. The Absolute is the middle point, the centre of indifference of the magnet; and therefore, in itself, is no magnet at all, but first becomes such by setting its two extremities over against each other, as North and South poles, or Thesis and Antithesis, the centre, or the true Absolute, existing

only as the synthesis of these opposites. Break the magnet in two at this medial point, and each half at once becomes a perfect magnet in itself, with its own set of opposite poles. Repeat this process indefinitely in thought, since any object of thought can be conceived, or become determinate, only through its discrimination from, and opposition to, some other object, and you have the successive stages of individual and determinate being, which are the phenomenal manifestations of being *per se*, or All in One, which lies at the centre. The Ego and the Non-Ego, Subject and Object, are only the first of these manifestations, the product of the *first* self-diremption of the Absolute.

But here Hamilton's objection comes in, and is really fatal to the whole theory. In order to reach this point of indifference, and thereby to apprehend the Absolute as such, before its *first* act of self-diremption, we must by abstraction annihilate both the Object and Subject of consciousness. But then, what remains? Nothing; a mere blank. The abstraction of the contrast between Subject and Object is a negation of consciousness; "and the negation of consciousness is the annihilation of thought itself. The alternative is therefore unavoidable; either, finding the Absolute, we lose ourselves; or, retaining self and individual consciousness, we do not reach the Absolute." This objection was also wittily expressed by Hegel, when he said that "in Schelling's philosophy, the Absolute appears as if it had been shot out of a pistol." It is made suddenly to appear, without any reason why it is there, or why it is anything, since it is inconceivable. And as we can attempt to conceive it only by abstracting from all differences whereby one thing is distinguished from another, "it is but the night in which all cows are black;" and since all things are successively expressed as one or the other of the two poles into which it is constantly dividing itself, it is "only the method of a painter, who has but two colors on his palette, red and green, the former to be used on historical pieces, the latter on landscapes."

All this is frankly acknowledged by Schelling. He admits that consciousness is a condition of knowledge, and therefore that a conscious knowledge of the Absolute, *to us*, is impossible. As a conscious and understanding being, man can apprehend only the Relative; for every object of his thought must be conceived as relative, if not to any other object of thought, at least to himself, as the thinking subject. The Absolute can be apprehended only by a sinking back out of consciousness. Only if man be himself the Infinite, can the Infinite be known by him. "*Nec sentire*

Deum, nisi qui pars ipse Deorum est." None can feel God, who does not himself share the Godhead.

But Schelling asserts that there is a capacity of knowledge above or behind consciousness, and higher than the Understanding, and that this knowledge is competent to human reason, because this Reason itself is identical with the Absolute. In this act of knowledge, which he calls the *Intellectual* Intuition, as distinguished from the intuitions of sense, there exists no distinction of Subject and Object, no contrast of knowledge with existence; all difference is lost in mere indifference, all plurality in simple unity. The Absolute itself is identified with the Reason which apprehends it. Because man is himself a manifestation of the Absolute, he can know the source and essence of his being only by falling back behind the limits and conditions of his phenomenal existence, and knowing himself as he really is, — God. All things are God; "in Him we live, and move, and have our being." Of course, the act is ineffable; it is "the vision and the faculty divine." He who is incapable of it is incompetent for philosophy. This is what Cousin means by his doctrine of the impersonality of Reason. That by which I apprehend the truth, he says, is not *my* reason, nor *your* reason, but Reason itself, as such, or in the abstract; also, the truth itself, thus known, is not my or your truth, but truth as such, or the Absolute, identical with the faculty which apprehends it.

In teaching this doctrine, that human reason has a power of *intellectual* intuition, as distinguished from the intuitions of sense, — a doctrine, we may remark, which is earnestly controverted by Kant, — Schelling's tone is somewhat lofty and supercilious, being strongly marked with the arrogance which characterizes most of his earlier writings. Philosophy, he says, just as much as Art, depends upon a capacity for creation, that is, upon a power first of producing its object, and then of reflecting or reproducing that object through an image or representation of it. The only difference is, that the productive power in Art is directed towards the external world, in order to reproduce there in sensible images what it has created; while in Philosophy, its gaze is turned inwards, in order to reflect its products in an intellectual intuition. Hence, the æsthetic sense is the proper organ through which philosophy exercises its functions, and just for this reason, the science of art is the true organon of philosophy in general. There are only two outlets from the world of commonplace realities; the first is poetry, which transfers us to an ideal world; the second is

philosophy, which causes the outer universe to disappear from our vision altogether. It does not appear, says Schelling, why a capacity for Philosophy should be any more common than a capacity for Art, especially in that class of men who, either from their exercise of memory, than which nothing more quickly kills out all creative power, or from their habits of formal speculation, which benumb their imaginative faculty, have completely lost their æsthetic sense. Mere reflection, he further argues, is a malady of the intellect, and when it extends its power over the whole man, it kills down to its roots his whole spiritual life. It is constantly leading us astray even in the conduct of affairs, and it blinds our perception of the ordinary objects around us. Its dividing power is not confined to the phenomenal world; but when it separates from this the spiritual principle, it fills the intellectual world also with chimeras, against which, because they lie beyond the province of reason, we cannot wage successful war. It makes permanent the separation between Subject and Object, between man and the world, when it considers the latter as a noumenon, or *ding an sich*, which neither intuition nor imagination, neither understanding nor reason, is able to reach or comprehend. Opposed to it stands true philosophy, which uses reflection only as a means, and which aims to bridge over that yawning chasm, and bring together again the sundered parts; since otherwise, it would have no need to philosophize. Evidently, then, the proper office of intellectual intuition is to discern the primitive identity of Subject and Object, to unite man with the universe, and thereby to resolve all into one.

Thus, as Hamilton declares, Schelling founds philosophy on the annihilation of consciousness, and on the identification of the unconscious philosopher with God himself. The essence of the system is pantheism, — not subjective, like that of Fichte, — but objective pantheism, by which all conscious being is swallowed up in the Infinite, the unknowing and unconscious God, One and All. Schelling spends much argument and ingenuity on the attempt to illustrate the process through which the intellect thus emancipates itself from the conditions of time and sense, and even from all the limitations of its own being, so far, at least, as to catch glimpses of that unfathomable abyss in which it is itself engulfed. A knowledge of the Absolute, he says, is a recognition of the essential identity and indifference of all things. In it, all contrast and opposition is taken away. Thought is identified with existence, the ideal with the real, the subjective with the objective, the universal with the particular, the infinite with the finite, the one with

the all. The essence of all things is one, and what creates apparent diversity is only the distinction of Form, whereby individuals are seemingly distinguished and set off over against each other. Abstract these differences of Form, and what remains is the indistinguishable essence. Thus, the artist identifies the ideal with the real in his own work, which is a true work of art only so far as it perfectly embodies the Idea on canvas or in marble. The forms which the geometer contemplates in abstract space represent the eternal and immutable relations to each other of what really exists only in idea, and to which the visible diagram is but an imperfect approximation. Every judgment is an identical equation, and its formula, A = A, does not determine the nature, or affirm the existence, of either member of the equation, but only affirms their essential identity, whatever they may be.

Objective pantheism, as it is conceived by Schelling, may perhaps be best illustrated by that common but vague abstraction and generalization, whereby we designate the whole external universe, all the forces operating in it, and all the physical laws which are the expression of these forces, by one word, as *Nature*. Apart from any theory upon the subject, and, indeed, in order to avoid the necessity of framing or adopting any theory respecting the origin and constitution of things, we ordinarily speak of *Nature* as one connected whole, of all the forces which produce its various phenomena as the powers of Nature; and then, carrying the generalization still further, we consider all these individual causes, or modes of operation, and the phenomena dependent upon them, as the manifestations of a single force, the one great power which operates in Nature, and controls all its forms of being. Nature to us is an aggregate of objects and events, the former coexisting in space, the latter succeeding each other in time. We consider the forms and various attributes of different substances, and all the changes to which they are subject, as determined by some cause, we know not what, acting from within outwards, which constrains all things to be what they are; and this is what we call Nature. Thus, we say that it is the Nature of matter to gravitate, or for all its particles to attract each other; of the particles of given substances, to cohere; of light, to radiate in straight lines from a centre; of heat, to diffuse itself equally; of plants, to grow; of animals, to be sentient; of man, to think. All that we are, and all that we behold, are but the various forms of Nature, and manifestations of her occult power.

Now, what is with us merely a loose form of expression, in-

vented not to simulate knowledge, but to confess our ignorance, is, to Schelling, the keynote of philosophy, and the secret of the universe. To him, Nature is the Absolute. It is the mysterious, inconceivable, and unconscious force or agency, which is the source of all things, the origin of all phenomena, of all that manifests itself either to sense or consciousness. It is not only their source, but their very being. It is at once the spirit and the substance of the universe; it is that which makes them *what* they are, and it is all *that* they are. We cannot know it, we cannot even think it. We can approximate to a knowledge of it only by falling back into Nature, and becoming identified with it. In such a trance or mental vision, I must become unconscious, and first know myself only by knowing that I am not myself, but am only one of the infinite manifestations of the Absolute. The universe then exists only in idea, and this idea struggles up to consciousness through an infinitude of phenomenal forms, first realizing itself in them, and culminating at last in the mind of man. The successive stages of this upward progress are designated by Schelling as *potenzes*, or grades of phenomenal existence, from the brute clod, or lowest form of Nature, up to the highest manifestations of life and thought. And since all is but the manifestation of one unconscious energy, all takes place by one law of development, one law of polar force, through which the One uniformly and necessarily becomes the Many. This law of development it is the business of science and philosophy to trace and demonstrate. The progress of science consists in detecting ever fresh indications of the uniformity of Nature's work, and the oneness of her being.

The reader would be only puzzled and confounded, if he were to attempt to penetrate far into the copious details of Schelling's system; since it is evident, from this mere sketch of its groundwork, that he is obliged to traverse the broad fields of science, history, and art, with a long series of sweeping generalizations, ingenious speculative views, and bold anticipations of the future progress of discovery. The main branches of his philosophic tree, moreover, are covered with such a profusion of foliage and fruit, that our attention is diverted, in spite of ourselves, from the main features of the system, and lost among a multitude of particulars. It must be observed, also, in justice to Schelling, that although he had a competent knowledge of the various departments of physical science as they existed at the beginning of the present century, the progress of discovery since that time has given a new aspect to many of the facts and laws which were considered and incor-

porated into his system, has thereby taken away much of the evidence on which he relied, and has made his speculations seem much more fanciful and unfounded than they appeared to be when they were first promulgated. He was thus placed at a disadvantage even during his lifetime, since he published his "Philosophy of Nature" when he was yet a young man; and for this reason, if for no other, Hegelianism for a while triumphed over him.

The first movement of the Absolute towards its manifestation to sense and consciousness, according to Schelling, is by its own self-diremption, through the law of polar forces, into the two opposites, outward Nature and Mind or Spirit. But as both these are mere expressions of the unity which lies beneath them, whence they spring, the two must perfectly correspond with each other in all their manifestations. Nature must be the visible soul, soul the invisible nature. Each exists only as the conflict of two opposing forces. Mind is the unity of a limiting and an unlimited force. It would fain extend itself to infinity; but it can become conscious only by abutting upon some obstacle, by which it is shut in and rendered determinate. In like manner, Matter must be conceived, not as an inert mass, but as the antagonism of the two opposite forces, attraction and repulsion, the former appearing in cohesion and gravitation, the latter in impenetrability, or the power by which it excludes every thing else from the space occupied by itself. But Force is, as it were, what is immaterial in matter; it is that which may be compared to mind. Then the two are essentially identical, each being the result of a conflict of forces, which are at bottom the same. Nature appears, then, as the counterpart of mind, and produced by mind, only that the mind may, through its agency, attain to a pure perception of itself, that is, to self-consciousness. Hence it appears, notwithstanding the objective aspect of Schelling's pantheism, that his system at bottom is essentially idealistic. The universe exists only in thought; and yet thought is itself only a development of universal nature, that is, of the Absolute. Mind, he says, continually seeks to externalize itself in outward visible forms, and thereby to become finite; but then the infinite power within reasserts itself, and it returns victorious from every such effort at objectivation into identity with itself as pure Subject. It is by a succession of Potenzes, or distinct steps, that this process of evolution and involution is continually carried on. In order to trace these parallel developments of matter and mind, Schelling divided philosophy into two parts, and wrote a separate treatise upon each, as the "Philosophy of Nature," and "Transcendental Idealism," or the Philosophy of Spirit.

The Absolute is the identity of thought and being, of the ideal and the real, of the subjective and the objective. We take the Realist at his word; we adopt his theory. What he stoutly maintains is, that the actual material thing, — a lump of iron, for instance, or a book, — is precisely what we perceive and think it to be. Just so, we answer; the perception and thought perfectly correspond to the real object. There is not the difference of a hair's breadth between them. *Esse = percipi.* Thought and Being are One. I myself am one thinking being; and therefore, all that I think, — the outer universe of men and things, external Nature, — is one; for you have just asserted that this Nature perfectly corresponds to my thought. To be still more exact, at any one moment, I myself am not precisely one thinking being, but I am one thought; since, for that one moment, one thought expresses my whole existence, and is my entire being; and if that one thought represents the universe, then the universe is that thought, and does not differ from it by the diameter of a hair. The Absolute is the middle point of the magnet, the centre where there ceases to be any difference between the two opposite poles, the Ideal or Subjective at one end, and the Real or Objective at the other. The formula for the Absolute, then, is A = A, north pole indifferent and indistinguishable from south pole, the Ideal identical with the Real. The difference between these opposites emerges only in the world of phenomena, of that which only appears, not that which really is. And this difference is only one of quantity, not of quality; taken at any one point on the bar of iron, other than the centre, magnetism is still one, only there is a predominance either of north or south polarity. Just so, equilibrium of quantity between the Real and the Ideal exists only at the centre of indifference; and at every stage of removal from the Absolute, difference between individual things appears as a mere preponderance of either force, but by no means as the entire absence of one of them. Illustrations may easily be found of this tendency of mere quantity to pass over into an apparent difference of quality. Thus, merely by diminishing the *quantity* of heat, water changes its *quality* from a liquid to a solid state, and becomes ice. If we designate the Ideal or Subjective pole by A, and the Real or Objective pole by B, then the formula for the finite, that is, for the union of a conscious Subject with an Object different from itself, is A = B. According as A or B is preponderant, it appears as the positive, and its contrary as the negative, pole; naturally so, as the difference is only quantitative. Thus, for exam-

ple, in a particular stone, the Objective preponderates, and the formula becomes $A^- = B^+$. On the other hand, in the concept, or abstract general idea of *stone* as a whole class of objects, the Subjective or Ideal pole predominates, and the formula is, $A^+ = B^-$. Of course, + and — are here used not in their strict algebraic sense, but only as symbols for more or less.

Schelling distinguishes three Potenzes, as he calls them, or degrees of preponderance, on both the Real and the Ideal side. Observe that each is only relatively Real and relatively Ideal; and this is precisely what is meant by saying that the phenomenal difference between them is only quantitative; there is no real difference of quality. The absolutely Real is identical with the absolutely Ideal in the centre of indifference, the Absolute, where all is one and one is all. The relatively Real, or Objective phenomenal being, appears as Gravity, Inertia, Matter, designated as B^{+1}; next, as Light, Movement, Force, which are B^{+2}; lastly, as Life, Organism, Animal, B^{+3}. It is easy to point out the differences between the various forms and forces of external nature, which Schelling had in view, when he arranged them as successive steps or Potenzes whereby the Real returns towards the Ideal. Thus, the action of Gravity is centripetal, tending to draw all into one; but that of Light is centrifugal, tending to infinite dispersion. Again, Inertia may be conceived as the impediment, and Movement as its opposite, or the impediment overcome. Matter is passive, and Force is that through which this passivity is vanquished. What follows is much more fanciful, was elaborated by Schelling at a later day, and appears to lack evidence and to be deficient in precision of thought.

The relatively Ideal, or Subjective Being, he says, appears as Truth, Science, abstract general Idea, these being the first Potenz, A^{+1}. Next, Goodness, Religion, Feeling, A^{+2}; and lastly, Beauty, Art, the Product of free Activity, A^{+3}. The entire development of the Real Potenzes gives us the external universe, standing under its laws of physical necessity. The crown and complement of this world of realities is Man, regarded as the microcosm or representative of the universe. The complete development of the Ideal Potenzes gives us the history of the free activity of the human race. The crown and complement of history is the ideal State. Reason is the knowledge of the identity of the two sides in the Absolute, or God; and the crown and complement of the reason which has risen to a full cognition of itself, is Philosophy.

In every form, one of the two factors or constituents of the

Absolute, as I have said, is predominant; but the other is never entirely wanting. In the forms of Nature, there is an excess of Reality or Matter; but from the ideal factor, this Matter receives Form, Life, and Soul. On the other hand, the creations of the human mind in Science, Art, and Religion, although especially representing the Ideal, always proceed from, and go back to, the Real. The Idea incorporates itself in outward visible forms. Science appeals to the senses in diagrams, apparatus, and experiments; in the objects of natural history, classified according to its ideas in herbaria and museums; in visible symbols even of abstract general ideas. Art creates imaginative ideal forms, but embodies them in paintings, statuary, and architecture. Even religion must have its *cultus*, its rites, its symbols, its temples, its music, and its priesthood. As Nature manifests a constant bias and pressure towards the Ideal, so, on the other hand, Spirit seeks for its universal and formless conceptions a definite shape and a solid foundation.

The magnet is not the only form in which the law of polarity shows itself in Nature; rather this law is revealed throughout all parts of the universe, so that Nature is, so to speak, one great magnet. Another phenomenal form of the polarizing power in Nature is electricity, having its positive and negative sides, which, on coming together, neutralize each other. The same law is found by the physicist again, we are told, in the phenomena of light; and by the chemist, in the compounds of oxygen with nitrogen. Even in the world of organic forms, this mutual play of contrary forces is recognized. The plant and the animal are the representatives of two opposite directions of the organizing force or tendency in Nature. The plant consumes carbonic acid and gives out oxygen; the animal inspires oxygen and gives out carbonic acid. Throughout the vegetable and animal kingdoms, also, this law of polarity shows itself in the distinction of sex. In the world of spiritual life, also, the same polar opposition appears again in higher forms, as in the contrast of knowing and doing, of religion and the state. But the most striking illustration of it is in that great law of perception and thought, to which we have so frequently referred, that each cognition comes to us only by discrimination or difference, that is, by contrast. We know what any thing is, only by distinguishing it from what it is not. *Omnis determinatio est negatio.*

Philosophy contemplates this universal law of polarization under the form of triplicity, as Unity which is the Thesis, Duplicity or

Plurality which is the Antithesis, and the Identity or Indifference of these two, *i. e.*, Many regarded as One, which is the Synthesis. What first exists is simple Unity identical with itself. This unfolds itself, or is differentiated into another, or many others, as the opposite of itself; and then these two opposites are merged into a higher Unity, more complete and determinate than the former one. Only the Absolute, the original All in One and One in All, that is, God, is a full expression of this Triplicity or Totality. But every particular substance, as we have seen, and even every thought, is a relative identity of the Real and the Ideal. The application of this system to the theological doctrine of the Trinity is almost too obvious to merit notice.

The simplest form under which the Absolute *appears* in Nature is Matter, regarded merely as extended and impenetrable Substance. Here the Real element largely preponderates. And yet, Matter is not a lifeless inert mass, purely external; rather is it a union, a relative totality, of the external, which is only the surface of Matter, and of the internal, which is Force, as manifested in Impenetrability, Gravity, Cohesion, etc. All the attributes of Matter which are cognizable by sense belong exclusively to its surface; therefore, says Schelling, Matter has no inside, no interior; cut it up into as small portions as we please, we never come in contact with anything but its surface. What we *conceive* as its interior is the Ideal element, is pure Force; or rather, is the synthesis of two opposite Forces, attraction and repulsion, the former appearing as gravity, or weight, and cohesion, the latter as impenetrability, the force which excludes all other Matter from the space occupied by itself. But as the Real or objective factor predominates in it, it is designated as $A^- = B^+$; and as the earliest form of the relative identity of the two factors, it is A and B in the first Potenz.

Into this comparatively dead and inert mass come life, movement, and form, through Light, which is the second Potenz or stage, A^2. The Ideal factor or element strives to overcome the Real; the principle of activity or force, which is the male element of nature, overpowers the principle of rest, or inertia, which is the feminine. Here we cannot help remarking of Schelling's doctrine, that the distinction of sex exemplifies the law of polarization, that it seems more fanciful than scientific. Under the influence of Light, material particles leave the places assigned to them by merely mechanical laws, and unite and are developed into various forms under dynamic laws. The *nisus formativus*, the formative

impulse, in Nature, begins to show itself, and to advance from the lower to higher forms, Time being the schema of this progressive development. The earliest shape or form which Matter assumes, when it leaves the state of mere inert and shapeless aggregation into which it is brought by gravity, is that of the straight line. The Force which thus arranges them in lines is the force of Cohesion, and the universal schema or expression of this force is magnetism. All outward Nature is one great magnet; and every particular substance, also, is a magnet.

Again, from the effort of different bodies to increase their own cohesion, and to diminish the cohesion of other bodies in contact with them, electricity is developed. The body which suffers a relative diminution of its cohesive force is said to be positively, that in which the cohesion is relatively increased is negatively, electrified. Still further; even the union of Magnetism and Electricity does not represent the totality of the dynamic process. This is first effected by Chemical action, which takes place through the two former agents, and appears in its most complete form as Galvanism. Therefore, Magnetism, Electricity, and Galvanism are the three stages of the Dynamic process. The first of these is relative identity or the Thesis, the second is relative duplicity or plurality, the Antithesis, and Galvanism is relative totality, or the Synthesis.

The first two powers of Nature, Gravity and Light, together with the dynamic process which is conditioned by them, elevate themselves into a third Potenz, A^3, Organic Life. Here the external material form is a compact body of determinate shape, containing in itself a persistent principle of movement, a *nisus formativus* or continuous tendency to development, so that its existence belongs to Time as well as to Space. The lower forms of nature's products have a permanent existence, or endure unchanged; but the organic life of the individual has a beginning and an end, birth and death; though the species to which this individual belongs is perpetually reproduced, so that the idea or plan is perpetuated.

The living organism develops itself under three distinct forms, as Vegetable, Animal, and Human Life, each having its distinctive and independent principle of development. In plants, this is the law of reproduction; in animals that of irritability; while sensibility belongs to man alone. These exist in inverse ratio to each other; that is, as irritability becomes stronger, the mere reproductive faculty is diminished; and irritability again is lessened, as

sensibility gains the upper hand. Another opposition manifests itself within this sphere, as the respective tendencies to oxidation and deoxidation. Vegetable life is perpetually deoxidizing the compounds of carbon, nitrogen, etc., while the life-process of the animal consists in absorbing oxygen by respiration, and thus oxidizing them again. Growth and continuance of the species are, both of them, phenomenal manifestation of one and the same tendency, or physical law, that the organization persistently strives to individualize itself in successive forms embodying the same idea, or built on the same plan. But this very law of individualization is an expression of polarity, inasmuch as, by a process of self-diremption, one becomes two, the parent duplicating itself; and this duplicity or plurality is again resolved by a higher synthesis, the contemporaneous and successive individuals of any one species being properly regarded as continuous products, or manifestations of one organism or organizing process. Sometimes, as in the case of the corals, and even of the bees, they are hardly individuals, but form a sort of republic, having a federative life. The drone, the worker, and the queen-bee are the three limbs of one organism. Thus the law of triplicity or polarity reigns throughout external Nature.

We need not carry this sketch any further, and I omit a multitude of ingenious and striking details. A mere glance at the Ideal or Subjective phasis of the theory must suffice. Man, the crown and complement of the physical side of nature, is a finite being, but endowed with a ceaseless impulse and striving towards the Infinite and the Absolute, that is, towards a union with God. The happiness and the morality of man consist in the progressive development of his ideas, in the complete harmony of his actions, and in the gratification of the impulse which his reason prompts towards organic creative formations; in a word, they consist in the cognition and imitation of the eternal infinite essence of the Absolute. Two ways lead man towards this object, Science and Action. Science is the Ideal form of reason; Action is its Real or objective manifestation; but Science and Action have one and the same end in view, namely, the representation or realization of reason's ideas. While we apprehend through Science the organic laws of that great process of development which we call Nature or the World, we behold immediately the living spirit of God; for the World is nothing else than God's revelation of himself under *finite* forms. But just so we approximate to the divine essence by Action, when we, by our deeds, carry out into

reality the universal law of development and harmony; when we, with all our powers, strive to raise humanity to perfectness and completion.

Science and Action, Truth and Goodness, cease to be opposites and are fused together in Art, which, as the creator of the beautiful, is the synthesis of the two. Art is the complete and perfect form under which the Infinite is represented to our reason. The images which it creates are something external and corporeal; but it makes these images live, through infusing into them the breath of the divine Idea. In these artistic creations, the Absolute speaks to us immediately and unveiled, and shines around us with its God-like splendor. What Science seeks in vain to accomplish through the embodied operations of thought, what morality holds out as a lofty but remote Ideal, wherewith to quicken and rouse our Will, *that* the Artist, through a single creative act of his genius, places directly before us in a living form. Hence, Science leading to Truth, Morality guiding to Religion and right action, and Art creative of Beauty, are the three *potenzes* which make up the totality of the Ideal side of Nature.

And yet Art is not, in every respect, an adequate expression of the Absolute. This cannot be completely revealed in any *individual* thing, or any single representation of one Idea. It can pour forth the inexhaustible fulness of its essence only in a multitude of individuals, who, through harmonious organic laws, are fused together into that living unity which we call a State. This is the external or objective organism, which first brings Freedom into harmony with compulsory Law, as well in the aggregate life of the community, as in the single acts of the individual citizen, and which, after the divine prototype, is the artistic forging together into one body, *Ineinsbildung*, of morality and religion, art and science. The State is the realization of the idea of Right.

Again, as a merely external and objective manifestation of the Absolute, the State must have as its complement an Ideal factor; and this is Religion, or the Church. Religion is the intuition of God in his infinite revelation and development of himself. This revelation of God finds its highest expression in History, that grand manifestation, on the theatre of the universe, of the process of development of human freedom and civilization. The succession of events which the historian contemplates is not a blind mechanism of physical causes and effects, under the despotic rule of necessity; neither is it a picture of humanity driven forward by the fierce

impetuosity of blind passions and appetites, without any determinate aim or law of action. Philosophy perceives that human life is neither impelled by thoughtless caprice nor shaped by the stern necessities of physical law; but in the steady development of the human race, it perceives the agency of divine Providence, the work of God himself.

Thus, History comes back to Religion, to the immediate revelation of God to man and the return of man to God. As Nature, the All of *corporeal* things, finds its highest expression in Man, so Man rises by a continuous development in Science and Art, Morality and Religion, to unity with God, the absolute identity of all things. The intellectual intuition of this unity with the Absolute is Philosophy, which, as the universal essence of reason, unites in itself all the other expressions of spiritual life, and comprehends them in their absolute identity.

CHAPTER XIX.

HEGEL. I. — ALL RESOLVED INTO ONE.

GEORGE WILLIAM FREDERIC HEGEL, the founder of the third philosophy of the Absolute based upon the principles of Kantian metaphysics, was born at Stuttgard in 1770, and died of the cholera at Berlin in 1831. His life was an uneventful one, devoted with indefatigable industry to the development of his theories, the usual round of occupations for an academic man in Germany affording him a livelihood, at first narrow and poverty-stricken, and only becoming reputable and independent when he was well advanced in years. In 1818, he succeeded Fichte as professor of philosophy in the University of Berlin, the highest post of honor and emolument then open to a metaphysician in all Europe. Previously, as schoolmaster, editor, author, *privat-docent*, and ordinary professor in one of the lesser German universities, he had earned his bread and acquired some reputation; but nothing more. After his removal to Berlin, his fame blazed forth like a meteor, and his philosophy became the leading topic of the day, not merely in academic circles and schools of theology, but in literature, politics, and art. Hegelianism was debated not only in the Universities, its proper home, but in the council chamber, in the halls of legislation, in the popular journals, and even in the marts of commerce. We are told, that the first question which was asked respecting any person who appeared likely to obtain distinction and power in any career whatsoever was, Is he, or is he not, a Hegelian? Parties were formed, and vehement discussions ensued between them, in respect to the proper interpretation of Hegel's doctrines, and the right application of them in theology, politics, legislation, and history. These parties long survived the death of "the Master," as he was called by his admiring disciples of whichever faction; and it is only within a few years that we have ceased to hear much about Young Hegelians and Old Hegelians, Hegelians of the Centre, the right Centre, the Left, and the extreme Left; though many of the eminent men are still living and

active who were long familiarly known as constituting these distinct schools.

The popularity and influence of Hegel's speculations appear the more remarkable, as they are more refined and subtle, and are clothed in phraseology more repulsive and difficult to be understood, than any philosophical doctrine that has been broached since the days of Heraclitus the Obscure. Even one who has fully mastered the "Critique of Pure Reason," and the *Wissenschaftslehre*, may still shrink from grappling with the "Phenomenology of the Spirit" and the "Encyclopædia of the Philosophical Sciences." The story is told of Hegel, that he remarked despondently, when on his death-bed, "I shall leave behind me in all Europe but one man who understands my philosophy; and he don't." Dr. Stirling, an enthusiastic Scotch disciple, who has spent years in Germany in intense study of the system, has published, in two bulky octavos, what he calls the "Secret of Hegel." But it is a "Secret" very imperfectly divulged; since it touches, after all, only on a corner of the subject, and the writer himself sees fit to discourse in that fantastic, jerky, and discursive style, full of queer conceits and labored intensities of expression, which Thomas Carlyle once made popular, though it is sure to prove a Nessus-shirt to any one who has not Carlyle's genius.

After all, Hegel is not a positively bad writer, like Kant. He has a large command of the vast resources of the German language, and often expresses himself with much force, terseness, and point, and occasionally with tingling wit and sarcasm. But he is harsh, crabbed, and obscure, through the constant and excessive use, or rather abuse, of the most repulsive terminology, the most uncouth jargon of technical terms, that the perverse ingenuity of man ever invented. In the pedantic employment of this barbarous dialect, he out-herods Herod; in comparison with his, even Kant's technical phraseology appears almost pure and classical. In respect to this profusion of abstruse technicalities, a mastery of which is the shibboleth of the sect, Menzel, himself a German, says, "Let a person read a philosophical work of Hegel, and ask himself if there ever was a nation in the world, who would acknowledge such a language as its own." And there is this further evil attendant upon the use of such a pedantic dialect, that after one has, by dint of hard work, become conversant with it, his own thought involuntarily assumes this garb, and he fancies that he has discerned new truths, or new confutations of old errors, when in fact he has been occupied only in translating what was familiarly known into new

forms of expression. He mistakes the acquisition of another language for the discovery of another science. In the writings of Dr. Stirling and Mr. Wallace, who are far the ablest English disciples and expositors of Hegelianism, I think one may sometimes detect this unintentional substitution of words for thoughts. On its native ground, the use of this metaphysical jargon seems to be rapidly dying out. Since the death of Hegel, a new generation have arisen, who refuse to undertake the drudgery of mastering its details, and who contemptuously reject the system because it is unintelligible.

Another obstacle in the way of understanding Hegel arises from the encyclopædic vastness of his aims; in the resolute and thorough-going manner, in which he turns topsy-turvy all the sciences, all departments of human life, thought, and action, in order to enfold them in the Titanic arms of his system, and compel them to dance at his bidding. The true or absolute philosophy, he says, must contain in itself, not only the principles of all antecedent philosophical systems, but all the doctrines of morality, religion, and politics, and all the ideas which have ever contributed to unfold the destiny, and promote the progress and culture, of the human race. It must explicate at once the philosophy of history and the history of philosophy, tracing each to its source in the development of one grand Idea, one fundamental principle of thought, which unites and reconciles all oppositions and contrasts, and leaves nothing unexplained in the nature and life of man, whether as an individual or a race. Philosophy, he says still more audaciously, "is the representation of God as he was in his eternal essence, before the creation of the world or of any finite being;" and beginning at this point, the office of philosophy is to repeat in thought the act of creation, showing how the universe of all that is, and all that ever has been, is evolved by successive steps out of nothing, through what he calls "Immanent Dialectic," or the necessary process of logic which is inherent in pure thought.

Of course, the system which is to accomplish this grand result must be based, in the first place, upon absolute Idealism; for if the universe exists only in thought, it will be comparatively easy to trace the process through which it is constructed out of pure thought; and secondly, it must be pantheistic in character; for only so far as One is identified with All, can All be developed out of One; and only so far as man's thought is identical with God's thought, can the act of creation be repeated or followed by the human mind. The system starts with the assumption, that Thought

and Being are identical. The universe exists for me, or for any one, only so far as we comprehend it; that is, so far as it is a notion or concept (*Begriff*), an abstract general idea, in my mind, or in some other mind. And what is true of the whole, is true also of each of its parts. Any thing whatever, any determinate being, exists only in the general Idea, the abstract Concept, which the mind forms of the class of objects to which this thing belongs; since this abstract notion embraces all the necessary and essential attributes of the objects thus ranked together, those which are peculiar to any individual member of the class being unessential, fleeting, and accidental. For instance: if I know or think John and William, not as individuals through personal acquaintance with them, but simply *as men*, my notion of them will include all the proper attributes of *humanity* as such; namely, a living body, a biped and two-handed vertebrate mammal, having a brain and an intelligence, and a capacity both for laughter and tears. Personal knowledge of them separately could add only the unimportant features of red or black hair, fair or olive complexion, tall or short, amiable or unamiable, and the like. Now, if individuals exist only in thought, it is evident that these their accidental qualities may be dropped out of view altogether, and the general abstract conception of the class to which they belong is all, as a phenomenon of consciousness, the genesis of which needs to be explained. To explain the origin, then, of all ranks of being and orders of phenomena, we have only to point out some necessary process of evolution or self-development of pure thought, through which, beginning with what is most vague, comprehensive, and indeterminate, — pure being, or existence as such, for instance, — we may trace the successive steps — "Moments of the Process," Hegel calls them — whereby we create the universe in thought, and people it with the groups of ideal beings and things, the individual phantasms, which are present to the empirical consciousness. Hegelianism, briefly expressed, says Schopenhauer, teaches us that the world is a crystallized syllogism.

It is already obvious that, in respect to the province and the functions of the Science of Logic, Hegel maintains a theory which differs widely from the doctrine now generally accepted, which is clearly set forth and defended by Kant. We have learned, if not from Aristotle, at least from the "Critique of Pure Reason," that Logic is concerned solely with the Form of Thought, and not at all with its Matter, or what we are thinking about. It is the science of thinking in the abstract, irrespective of the objects,

whether ideal or real, to which our thoughts may be directed. Hence, the science is not an organon, or a means of increasing our knowledge; and it furnishes only a negative test of the validity or correctness of the knowledge already in our possession. If the reasoning be incorrect in Form, the conclusion is invalid; but even if correct in form, the conclusion may be wrong, because derived from wrong premises; and Logic as such has no concern with the truth or falsity of the premises. That consideration belongs to the Matter of Thought. But as understood by Hegel, Logic is a material or metaphysical science, its great function being the evolution of truth, and in fact the creation of the universe, through the generative power of the mere process of thinking. According to his theory, there is no receptivity of mind, but every thing is evolved by the spontaneity of pure thought. Beginning with the loftiest of all abstractions, with pure and universal Being, which, because absolutely indeterminate or without attributes, is not distinguishable from Non-being, the mere process of thinking develops this shadow of a shade into the world of concrete realities which appear to be manifested to sense.

I can hardly suppose that this is intelligible as yet; but it is to be hoped that it will become clearer as we go on. A cardinal principle of Hegel's system is thus enunciated by him: that whatever is Real is Rational, and whatever is Rational is Real. Explicate this comprehensive maxim, and it will be found to mean, that the law of thought is also the law of things; that whatever I necessarily think, must present itself objectively to my consciousness, as at least an empirical reality; that the mind, or rather the universal consciousness, — for we must use pantheistic phrases now, all individual minds being reduced to one, the typical one corresponding to the Concept or general notion of its class, and this one being identified with the mind of God, — that this universal consciousness, I say, has a natural and necessary order of development or self-evolution, or thinks according to imperative laws, only the products of such thinking being what we call "rational;" and that all phenomenal reality, all that is or ever has been, must be capable of reduction to these categories of thought, or of explanation as inevitable Moments of the one all-comprehensive Process, through which the particular is educed from the universal, the All from the One.

But here a difficulty presents itself, in the shape of a very inconvenient test of the validity of the whole system. If it be not only well founded in its general conception, or as a whole, but

also, as "the Master" and his disciples maintain, if it has been so far successfully worked out in all its parts, as to afford an adequate and rational explanation of all past and present phenomena, — if all that is now, or ever has been, present to consciousness conforms to this exposition of its nature and origin, — then Hegelianism should be capable of answering all demands that may be made upon it, and of revealing the secrets of the *future*, as well as unriddling all the enigmas of our present and past existence. I call this an inconvenient test, since it is an awkward trial for any one to be compelled to prophesy, under penalty of being discredited altogether, if the events do not conform to the prediction. Accordingly, we detect some shuffling among the Hegelians upon this point. So far, indeed, as the History of Philosophy is concerned, all is plain; we have only to regard Hegelianism as a finality, the culmination of the speculative spirit, and therefore as *the* Absolute Philosophy, beyond which there is no progress, and, conseqently, no future systems whose rise is to be predicted. But in respect to the Philosophy of History, the case is very different; for here indefinite progress, or at any rate, unceasing change, whether for the better or the worse, must be anticipated; and to determine the laws, or write out *a priori* the history, of what is to be man's future experience upon earth, is more than the most daring speculatist will venture to attempt. Yet consistency requires him who dogmatically asserts that all which has been is but the necessary evolution of the principles set forth in his theory, to be equally positive and unerring in the application of the same principles to the record of the future.

My present purpose, however, is not to criticise, but to expound Hegelianism. I have commented upon this single point, merely in order to call attention for a moment to that endless diversity of human affairs, that ever changing lot of man upon earth, which bears so strong testimony to the perfect freedom of the human will, in spite of the efforts made by speculative fatalists to regard all events as necessarily determined by the universal laws which they have evolved either from a past experience, or from the depths of their own consciousness.

One source of the great popularity of Hegelianism, especially with politicians and theologians, may be found in its conciliatory character. It has a strong tendency to bridge over the separation of parties and differences of creeds, and to effect compromises between jarring opinions. It bears a catholic aspect, and seems to open its arms in order to gather into one fold the inmates of many

camps, who had hitherto waged fierce war upon each other. The law of trichotomy, which is the basis of the Hegelian logic, enables us to take up any two contradictory ideas, and melt them into one synthetic notion, which includes them both. Hence, a consistent and expert Hegelian may repeat any theological creed, join any political party, or defend any philosophical system, without prejudice to the opinions which he formerly avowed. At one time, Hegel himself was vehemently accused of abandoning his principles as a Liberal and a Reformer, and joining heart and hand with the Conservatives in Church and State, who, in return, freely dispensed official patronage to him and his disciples. Even Schwegler, who was to a great extent his admirer and disciple, asserts that Hegel, through his connection with the government and the bureaucracy of Prussia, not only acquired political influence for himself, but the credit for his system of being a state-philosophy, his tenets having such official sanction as is usually given to a determinate theological creed by a union of Church and State; and he adds, that this artificial superiority over other systems did not always promote the internal freedom of his philosophy, or increase its moral worth.

The accusation was unjust, so far as it imputed to Hegel a dishonest motive; for the essence of his philosophy consists, not only in finding everywhere unity under contradiction and identity under difference, but in regarding error and heresy merely as partial apprehensions of the truth. As all events, all opinions, and all systems are but Moments of the great Process, or stages of development of the one Absolute Idea, they bear their own justification along with them. Each is the necessary result of that which preceded it, and of its own environment of circumstances; each is at least an approximation to the truth, a step towards the realization of what is rational, an indispensable link of the chain which binds all into one. Hence, the system is one admirably adapted for effecting a junction of parties, and burying old differences out of sight. On the other hand, the same peculiarity gives it an ambiguous or Protean aspect, and makes its doctrines uncertain of interpretation, so that the former oppositions and contrasts may flame out again at any moment. The conciliation of hostile principles and interests, which is based only upon a metaphysical theory, and that one of indistinct speech and doubtful import, is not likely to be of long continuance. Hence the dissensions, to which I have already alluded, as breaking out in the school immediately after the death of its founder, and which separated it into parties that soon destroyed each other by mutual attrition. The philosophy of

Hegel had brilliant success for a time, but its career was short; at present, it is as effete as Scholasticism. After enjoying an unprecedented triumph, after coloring every form of German speculation in philosophy and theology for nearly half a century, a reaction has sprung up against it on its own ground, and appears to be now rapidly hurrying it into oblivion.

The two most important works of Hegel, upon which all the others are founded, are the "Phenomenology of the Spirit," first published in 1807, and the "Science of Logic," which appeared six or seven years afterwards. These two, in fact, are complements of each other, the former aiming to demonstrate the principles of his system by the analytic method, resolving the complex phenomena of consciousness into their elements, and thus reaching at last the Absolute Idea, whence they are all successively developed; and the Logic beginning, where the Phenomenology leaves off, with pure or absolute thought, and thus, through synthesis, tracing upwards its self-evolution, by a continuous application of its Immanent Dialectic, and by what appears as successive acts of creation, into the concrete universe as now manifested to the senses and the understanding. The Phenomenology resolves the All into One, the Logic develops One into the All. The Absolute Idea, which is reached only as the termination of the analytic process, is that which forms the beginning, the point of departure, in the synthetic evolution of the system. As I have said, the essence of ideal pantheism consists in regarding all determinate being, all individual forms of concrete existence, as mere phenomenal manifestations of the universal and the absolute. The Phenomenology attempts, by an effort of pure reason, to demonstrate the unreality or purely subjective and spectral character, of all that now appears, by following back the history of an individual consciousness through the unconscious or unremembered steps, by which it seemed to awake from nothingness into life, and then proceeded to construct in thought the apparent universe with which it is now surrounded. We begin, then, with this, the analytic, portion of the system.

The perceptions of sense have to do exclusively with the Single and the Immediate; that is, at any one moment, with some one form of individual and perfectly determinate existence. Any thing which is immediately cognized by sense, for instance, a piece of paper, a pen, or a book, is presented to us immediately as *this* thing, existing *now* and *here*. Every "this" (*hoc, hæcceitas*), whether past, present, or future, must have its own one time and place; it was, is, or will be *now* and *here*. "This" is the es-

sence of an individual phenomenon of immediate consciousness; "now" and "here" are its only possible forms. But in truth, neither of these is immediately known, and the individuality which they seem to manifest is a mere illusion, is only the Universal in disguise. To the question, What is "Now?" the answer, we will suppose, is, "*now*, it is day;" and we will write down this answer, as an intuition of sense, and therefore a truth immediately known, or certain. But we have only to wait till sundown, and the truth thus written down becomes a lie; for, *now it is night.* Evidently, to the intuitions of sense, each and every moment of time was, is, or will be *Now.* Thus, far from being individual, "Now" is a universal designation of time. And it is just so in regard to both the others. To the question, What is "Here?" I answer, "*Here* is a tree." But I have only to turn round, and this answer too becomes a lie, for lo! "*Here* is a house." "Here," then, though apprehended by sense as singular or individual, is really a universal designation for any object whatsoever. In like manner, *this* bit of paper, instead of being the designation of only one object, immediately known as such, is really a universal name for each and every bit of paper in the universe; since each of them may become, to any person now taking cognizance of it through his senses, "this" bit of paper.

I borrow, from Mr. Wallace's translation, Hegel's own statement of another instance. "Similarly, when I say 'I,' I *mean* my single Self to the exclusion of all others; but what I *say*, namely, 'I,' is just every 'I,' which in like manner excludes all others from itself. 'I' is the absolute universal; and community or association is one of the forms, though an external form, of universality. All other men have it in common with me to be 'I'; just as it is common to all my sensations and conceptions to be *mine.* But 'I' in the abstract, as such, is the mere act of concentration or reference to Self, in which we make abstraction from all conception and feeling, from every state of mind and peculiarity of nature, talent, and experience. To this extent, 'I' means the existence of a wholly abstract universality, a principle of abstract freedom. *Thought*, viewed as a Subject, is expressed by the word 'I'; and since I am at the same time in all my sensations, conceptions, and states of consciousness, *thought* is everywhere present, and is a category that runs through all these modifications."

Moreover, the single or determinate is necessarily finite, and therefore limited, or bounded, being. But where its limit or boundary comes, its *being* ceases, and something else, "the other" of it-

self, — open space, for instance, — begins; and this is the negation, or non-being, of what we started with, namely, the individual and concrete. Hence, every single being, because determinate, leads directly to that which is "the other" or negation of itself; *it is* what it is, only because it *is not* something else. *Omnis determinatio est negatio;* it is hard, for instance, because it is not soft; it is substance, because it is not attribute; or attribute, because not substance. Therefore, single or individual being, because always leading up to, and mingled with, its "other" or contradictory, that is, non-being or nothing, cannot be true and pure Being, which must always be itself and nothing else. But this true and pure Being must be the *not-single, not-individual;* that is, it must be the Universal. We approach this true Being just so far as we leave behind us the single, the finite, and the determinate, and therefore rise higher in the scale of generality, and approximate to the All, the Universal, the Indeterminate. The Universal is the Concept, the general Idea, of the class or whole to which the individuals belong. Thus, individual men and animals quickly pass away, die, and are resolved into their elements. But the species or genus, the typical man or animal, representing all of them, persists, and endures forever as the universal Idea. In this Idea, as I have already said, are present all the necessary and essential attributes of the species; all the rest, belonging exclusively to one individual or another, is accidental and transitory. The most general of all is *the* Idea, or pure Thought in itself; free from all determinateness, from every definite quality, from any individuality; — Being that is not mingled with any Non-being, but is pure and Absolute Being in and for itself.

Perhaps enough has been said to make plain what is the starting point of Hegelianism, and the kind of reasoning whereby we are conducted to it. But I will add one other consideration, taken from the subjective aspect of the question. The ground of our erroneous conviction that the individual as cognized by sense is true or real being is, that the Ego *immediately* apprehends it as such. As Sir W. Hamilton would say, I am directly or immediately conscious of this individual perception, for instance, of the written paper now before me. But Hegel answers, consider first, that such perception necessarily involves two individual factors, — *this* Ego, or the individual I who perceive, and *this* paper as the object of the perception. Since both these factors must be present in order to constitute the perception, it is evident that each is conditioned by the other; in other words, it could not exist except

through the medium or intervention of the other. Then, neither is *immediate.* I can have the certainty of perception only through the other, that is, through the paper perceived; and the paper cannot be perceived except through me as perceiving it. The *paper* enables me to be conscious of *myself* as perceiving; but there is no certainty of the existence of the paper, except through *my* existence as perceiving it. But it is reasoning in a circle, first to prove A by B, and then B by A; first, to give me consciousness of myself through the paper, and then assurance of the paper through my consciousness of self. Then, *this* Ego and *this* sheet of paper are equally unreal, mere phenomenal manifestations of the Universal, the Absolute, the Idea.

If *perception* of individual things by the senses is thus a source only of illusion and error, can we acquire any clearer and better founded knowledge of them through reflection, which is the operation of the Understanding? As we do not *per*ceive a tree, for instance, in its true being, through the faculty of *sense*, let us examine the process through which we attempt to *con*ceive it, by the action of *thought, i. e.*, by reflecting upon the essential attributes of the whole class of objects — namely, *trees* — to which it belongs. How do we *conceive* "tree" *in general*, and not merely this or that *particular* tree? We first conceive it as the universal substance, "treedom" it might be called, which is here incorporated and fixed in this particular instance by a definite form, — say, by the special shape, size, and other qualities of the trunk, branches, leaves, fruit, etc., of this one specimen now before us. Just so, we may regard *triangularity* as the universal substance of all "triangles" whatsoever, and this "universal" as embodied in the particular dimensions of the sides and angles of the one triangle now drawn upon the blackboard. Or we may take, with equal propriety, just the reverse method: we may regard the *substance*, or particular Matter, as the special and determinate form or unity, in which the universal attributes or properties of all trees — namely, having root, trunk, branches, leaves, and blossoms — are here united or embodied. These attributes then appear as the more Universal, and the definite form of their union in this one case as the Individual or Particular. Thirdly, we may help ourselves out of the perplexity arising from the opposition of these two methods by considering the "tree" as the product of a single tree-producing *Force* in Nature, expressing or developing itself according to definite internal physical laws. This Power, which we generally call organic or physical Force, this general principle of creation, for-

mation, and self-development, expresses itself here, in an individual and determinate manner, in this particular tree; just as, elsewhere, it shows itself in all other trees. But this same physical Force reveals itself, not only in trees, but in countless other physical objects, — in the formation of the chemical elements, in different plants, minerals, animals, etc. In short, by the idea of Power or Force, we understand a universal relation or law of Nature and of our own consciousness; the law, namely, whereby anything does not stand in need of any other thing, outside of itself, in order to complete and furnish forth its own definite existence; but it develops all that it is out of itself alone.

Now, through this conception or intuition, call it which we may, of an immanent or indwelling Power or Force to develop one's self, we are raised to a higher stage of our consciousness, and into a wholly new circle of thought. According to the common view, both in sensation and reflection, *a foreign object*, a Non-Ego, stands over against the subjective consciousness, and these two together, namely, the Object and the Subject, first create a whole, which is the representation or mental picture of the Object. Here, a difference of opinion exists upon the question which of these two factors is the necessary and the universal, and which furnishes only the limiting and individual element. According to one theory, the universal of our subjective Sensation is limited and individualized by the determinateness of the Object to which we refer this Sensation; according to the other, the universal objective essence, the being of things in general, is restricted and made finite through the definite forms in which they are apprehended by us. But the ground of opposition between the two opinions falls away, when we have learned to know things as *the identity* of the immanent Power or Force *and* its Manifestation. Every thing then appears to us as a unit complete in itself, and shut off from every thing else; — as an essence unfolding itself from itself, and referring itself back to itself; — in one word, as an Ego, I myself. Then falls away also the opposition between ourselves and the objects of our perception and thought; for we are ourselves just such a Power or Force, which unfolds or develops itself from and through itself. As a tree develops itself from the seed, first into the tender shoot, then into a sapling, and so into the fully formed trunk with its wealth of branches, foliage, and fruit, all by an inherent vegetative force which was perfect, though latent, in its least developed form, the seed; so the human mind, the Ego of consciousness, even in its infantine state, has the latent and intrin-

sic power, without any agencies operating upon it from without, of subsequently developing itself into the universe of perceptions, thoughts, cognitions, and feelings, which form the theatre on which it acts its ideal life. We need not external objects to enable our consciousness to run this, its destined, career; but it contains within itself all the forms and determinations, through which it is successively expressed. Our consciousness is Self-consciousness. Nay, the tree and the Ego are one. Each is but the expression of the other; each is but the manifestation of one intrinsic immanent Force. Every thing is Ego, and so also is Man.

But I need not carry any further this analysis and explanation of the Phenomenology, which is the foreporch or introduction to Hegelianism. Strictly speaking, it does not constitute a portion of the system itself, but is only a preparation for it, an attempted demonstration of the principle from which it is to start, and of the method which it is to follow. Hegel himself calls it his voyage of discovery, the result of his endeavors to find, by a rigorously logical examination of the sources and nature of human knowledge, some one absolute principle, some firmly set basis of science, whence could be deduced and demonstrated, in proper order and connection, not only all that now appears perceptible to sense or cognizable by the understanding, but an explanation of the history of things, and of the rise and progress of the universe as it is now present to our thought. I have already cited his criticism of the philosophy of Schelling, that, in it, the Absolute, the starting point of all inquiry and the origin and foundation of all existence, appears, as it were, shot out of a pistol, — an arbitrary assumption, made only because something must be taken for granted, or philosophy will have no rest for the sole of her foot, and the secret why *this* universe is manifested to us rather than any other, or why any universe, indeed, should exist, either in appearance or in reality, will remain forever undivulged. In opposition to this loose and uncritical procedure, Hegel claims to have demonstrated in the Phenomenology, that individual and concrete existences, appearing before consciousness as perceived by sense or cognized in thought, are unreal and illusive, mere phenomenal manifestations of the one Absolute and Universal Being, perfectly indeterminate, which, by an inherent power, an "Immanent Dialectic," develops itself into all that has been, is, or will be. To follow and explain, step by step, this process of development of the All from the One, is what Hegel claims to have accomplished in his philosophy.

Let us admire first the boldness of the undertaking, — to ex-

plain every thing which is in heaven or on earth by the mere evolution of logical thought, whose spontaneous movement produces, out of itself, on the one hand, the material universe, and on the other, the intelligible or ideal world as it is present to consciousness. These two worlds, indeed, are at bottom identical with each other, being two similar though opposite manifestations of a single force. The absolute Idea of Hegel, unlike the universal substance of Spinoza, is essentially subjective; it is Spirit or Ego. Hence, the proper name of the system is "Absolute Idealism." Now, all Spirit or Thought is one, individual differences, as we have seen, being merged in the universality of the Absolute. Hence, the mind of man, because it is identical with the divine or universal thought, can think over again, or re-create in thought, the movement which first constituted, and still constitutes, the real and ideal universe. Universal history, the history of the human mind, of the sciences and the arts, of morals, laws, customs, religion, and philosophy, — all will be reproduced and explained by the self-evolution of thought from pure Being, or Nothing. Absolute Idealism aspires to nothing less than omniscience, to the science of God; or rather it does not merely aspire to, but declares that it actually possesses, this science, which is inherent, though latent, in itself, and needs only to be unfolded by a process which is spontaneous, and requires only to be observed, not to be guided.

According even to the common notion, God, being the principle and cause of every thing, must for that very reason possess in himself alone the supreme knowledge of causes and principles, the science of the essence of things; and it is worthy of man to aspire after this divine science. Nothing is possible except through thought; and every reality presupposes a thought equal to itself. No finite being can exhaust in thought the reality of all that exists, and still less can it comprehend the possibility and reality of all things. Then there must be an infinite intelligence, which perfectly conceives all possibility as possible, and all reality as real; and this intelligence is God. But according to what we have now learned, all difference and plurality being done away with, the divine and the human are one, and man's spirit itself is identical with this infinite intelligence. We must say of every thing which exists, that it exists and is maintained by an eternal act of knowledge on the part of the Absolute; and the spirit of man, being itself the Absolute, has the faculty of reproducing freely, through speculative thought, this eternal act of knowledge; and true philosophy is nothing else than such reproduction.

The world, says Hegel, is a flower which proceeds eternally from a single germ. This flower is the divine Idea, absolute and universal; and its spontaneous unfolding into full blossom is the self-development of pure thought.

As Dr. Stirling acutely observes, the systems of Locke and Hegel, though they are seemingly opposites, are really complements of each other, and thus, in one sense, are identical. Locke says, Concepts, or abstract general ideas, are abstractions from sensations; and Hegel only begins at the other end when he says, that sensations are concretions from Concepts or abstract ideas. Here, again, we perceive the conciliatory character of the Hegelian method, which resolves apparent contradiction into unity, and thereby enables us to say with impunity, and even with a semblance of great profundity of thought, that black is white. But the philosophy of Hegel, Dr. Stirling claims, is an improvement on that of Locke, in that it begins with pure abstract thought, which is, so to speak, "alive in itself," and is therefore able by its own activity to clothe itself with successive concrete forms and finite distinctions; while the objects of sense, because passive and inert, are incapable of evolution through their own power into higher forms. It seems to me, however, that this advantage is counterbalanced by a great defect; for pure thought, through excessive abstraction, has been divorced even from the thinker; and without the coöperation of the Ego, it does not appear, in any proper sense, to be "alive," or to be capable of exercising any function of life.

In order to make more clear what is to follow, something should here be said in explanation of Hegel's peculiar use of words, though I shall not attempt, in what follows, always to employ the words in the perverted meaning which he attaches to them. *Abstract* and *concrete* have, in his philosophy, almost the opposite of their ordinary meaning. The Idea in its concrete state represents, in his system, infinite virtuality, or the yet undeveloped capacity of becoming something else. It is the state of involution or potentiality, in which *all* is as yet involved in *one*. Things are *abstract* when they have been evolved, or, as it were, drawn out into actuality from this their hitherto ideal or potential condition. Thus, *abstraction* is not a quality, considered apart from its subject, but a thing regarded separately from the idea which is its essence.

In order to explain the three technical phrases, *an sich*, *für sich*, *an und für sich*, the frequent use of which makes Hegel's exposition of his system so obscure, I borrow with some abridgment the

language and illustrations of Mr. Wallace. That is *an sich* which is *in itself*, or implicit; it is given in the germ, but is, as yet, undeveloped. It is the potential as opposed to the actual, the latent as distinguished from the realized. The oak is contained *an sich* in the acorn.

That is *für sich, for itself*, which has become explicit and actual. It is the result of *an sich* when developed, and is applied to what has been acquired and made our own, as opposed to what was given in a crude condition. Thus, a human being, even in a state of infancy, has a capacity for reason; he is *an sich* rational; but it is for him to realize this endowment and become rational *für sich.*

Hence the phrase *an und für sich, in and for itself*, is applied to denote both what is pure and entire, and what is spontaneous and independent. The thing is taken in the entirety of its development, and that development is due to the evolution of its own native forces. It is the Absolute, in so far as it has passed through the Moments of the Process, and become every thing which it was destined to be.

The double meaning of the Latin word *explicatio* indicates the nature of the movement by which every thing is produced; to *untwine* or *explain* is, in the language of Hegel, to show what place anything occupies in the general development of thought. To *comprehend* is to know the origin or previous form of a thing; thus, we comprehend the universe when we understand how it is developed from the Absolute Idea. To *prove* is to reduce empirical data to their general expression, or in other words, to formulate them as the results of a general law. It was thus, says Hegel, that Kepler demonstrated the facts of the solar system, reducing them to their most general expression in his three celebrated laws. The various elements and distinct existences are only so many "Moments," or successive steps, in the universal movement of the one Idea; they are transitory forms, which have nothing real or permanent. "Self-diremption" is the spontaneous separation of a notion into its opposite parts, each being set off against the other as its contradictory.

CHAPTER XX.

HEGEL. II. — ONE DEVELOPED INTO ALL.

WE begin with what has been proved in the Phenomenology to be the only absolute reality, namely, Pure Being, which is universal, and therefore wholly indeterminate, having no parts or attributes whereby it can be distinguished from anything else, and so potentially comprehending every thing. This Idea, for it evidently exists only in thought, of abstract or pure Being, is the ultimate and absolute abstract; for it is that which remains after all qualities whatsoever have been thrust aside, and abstraction has been made from the whole world. It is the comprehensive, vague infinitude of Being, having its circumference everywhere, and its centre nowhere. It is every thing in general, or in the abstract, precisely because it is nothing in particular. "Let there be no earth, no sun, no star in all the firmament; let there be no mind, no space, no time, no God. Let the universe disappear." Still we have not got rid of this conception of Being in the abstract, which is absolutely essential to thought; for even if we declare that "nothing is," the word *nothing* can be understood only as *No-being*, or the opposite of Being, and therefore could not be predicated except through a previous thought of Being, of which it is the negation. Just as the definition of parallel lines, "lines that do *not meet*, however far extended," would have no significance to us if we did not already know what *meeting* is, — that is, what the idea is which parallelism denies; so, to affirm that Nothing is, is also to affirm that we think Being as such, for this is the positive, of which Nothing is the negative. To adopt the technicalities of Logic, Pure Being has infinite Extension, since it denotes or includes every thing, whether real or imaginary; and no Intension, for it connotes no mark or attribute whatever.

Now the problem which Hegelianism seeks to solve is, to explain how the phenomenal universe — all that now is or has been, whether in reality or in pure thought — is self-evolved from this Absolute Idea of Pure Being; evolved from it, because, as al-

ready said, the Absolute Idea potentially, or as Hegel would say, in the concrete, includes every thing, though in an *involved* or latent state; and *self-evolved*, because, as nothing exists outside of or beyond the Idea, there is nothing without to produce or assist the evolution, but it must take place by an internal and intrinsic Force, a necessary process of development from within; just as, to recur to a former illustration, the vegetative force inherent in the seed develops out of it, step by step, first the tender shoot, then the sapling, and at last the stately oak. Hegel undertakes not only to follow severally the various "Moments of the Process," that is, the successive steps of this self-evolution, from what is most universal and indeterminate up to what is most particular and definite, but to show how the whole Process takes place by successive exertions of one and the same Force inherent in the Idea, — or in other words, by constant repetition in act of what he calls the "Immanént Dialectic" of pure thought. To this end he invents a new Logic, which is only an improvement on that with which we have already become familiar in the philosophy of Fichte and Schelling. He lays it down as a universal law of pure thought, that every concept (*Begriff*) becomes more and more definite, that is, assumes one additional attribute after another, by successive acts of *heterization* or self-diremption; in each case, first passing over into the opposite or contradictory Concept, and then, by an act of synthesis resolving this contradiction, destroying the opposition between them, and uniting the two contradictories into a higher and more definite Concept. On this, again, the same Process is repeated, and so on indefinitely. Thus we rise, by a series of "trichotomies," as he calls them, just as by successive steps of a ladder, from the vague and indeterminate Idea of Pure Being up to the universe of definite conceptions and distinct realities, as these are grasped by the understanding or presented to the sense. He displays marvellous ingenuity and comprehensiveness of thought in the use of this logical invention, finding trichotomies everywhere, and by their aid bestriding the universe as with seven-leagued boots, thus aiming to repeat in thought God's act of creation, whereby the world was evolved out of nothing, or rather out of the thought of its Creator. Empiricism begins with the particular, with single phenomena and individual concrete existences, rising from these, by abstraction of differences, to what is universal and comparatively indeterminate. Philosophy, Hegel maintains, does precisely the reverse: it begins with the exclusion of all finite differences, that is, with the universal and infinite, and

from this comes down by successive determinations to the point where Empiricism began. It is not we who are to bring differences into the Absolute, but the Absolute which must produce them from itself, and thereby evolve the relative and definite out of its own essence.

The logic of trichotomy is so original and peculiar, and Hegel's success is so great in using it as a process of passing from one thought to another, that some illustrations of it here may be useful, as they will throw light upon the whole system. All Judgment is an act of determination, whereby the subject is rendered more definite by affirming or predicating of it one or more attributes. Thus, the Concept A, at first entirely vague, acquires one stage of determinateness, when we judge that *A is B*. But in so judging, we contradict A; for we declare that A is no longer A, but that it is B. And yet this contradiction is immediately resolved or denied by the result of the judgment, which is the complex and determinate affirmation of A B. We can make this clearer by taking a concrete instance. When I say that "Iron is hard," thereby endeavoring to make my conception of "iron" more determinate by adding to it the attribute of "hardness," I really make the two terms contradict each other; inasmuch as the judgment is, that iron is no longer iron, but is hard; and that hard is no longer hard, but is iron. Now the old Logic, which is the Logic still taught in the schools, affirms that contradictories exclude each other, or are incompatible, so that, of two contradictories, one must be true, and the other must be false; the two cannot be true together. But the Hegelian Logic affirms that this is not true, but that the synthesis, which is the result of the judgment, unites the two contradictories into the single but more determinate affirmation of "hard iron." What once was two contradictory thoughts, namely, "iron" and "hard," each being indeterminate, because not any attribute was affirmed of either, is now one determinate thought, namely, "hard iron." Accordingly, as all Thought consists of Judgments, this is the universal law of Thought, whereby we proceed from the abstract, the universal, and the indeterminate, to the concrete, the particular, and the definite. This, then, is the "Immanent Dialectic" of pure Thought: every thought or concept first denies itself by affirming some attribute of itself, and then denies this denial by uniting the thought and attribute into one higher and more determinate thought. And since this is a universal law of Thought, it is also a universal law of Things, for, according to Hegel, Things exist only in Thought.

I take, almost at random, some instances of the application of the law to what we call "Things," that is, to concrete existences. A drawing or engraving is made by the pen, pencil, or graver, with which the artist puts in the outlines and shadows wherewith to bring out the result. But the lines and surfaces shadowed would not alone constitute the picture, without the opposite or contradictory of shadow, namely, the lights, or the portions of the paper over which no lines are drawn; and it is precisely the union of these two contradictories, light and shade, which forms the picture. As yet, however, it is a colorless picture, mere light and shade. Now put in the contradictory of "colorless," namely, some definite color, say, green; and then we have, not a mere drawing in light and shade, but a painting, though a poor one, for it has only one color, green. Then put in the contradictory of this, that is, some other color, which is "not-green," say, brown. And thus continuously add other colors, each being the contradictory of those already used, because not the same with any one of them, and, as the final result, we have a rich and varied painting, made up, step by step, by the union of contradictories. And this Process is creation, as of a work of art, so of what we call a "work of nature," since both exist only in thought, and therefore are products or creations of thought.

According to Mr. Herbert Spencer's theory, founded, as he claims, on observation, the universal law for the course of development or growth in the organic kingdom is a process whereby homogeneity is self-evolved into heterogeneity, the like into the unlike, the simple always developing itself by throwing off the opposite or contradictory of itself, and these two contradictories then uniting into a higher, because more complex, stage of the organism. What is this but Hegelianism in physiology, though wrought out by induction from observed facts, while Hegel developed it *a priori* from the depths of his own consciousness? The beginning of all organisms, according to Professor Huxley, is protoplasm, a pasty substance as homogeneous and formless throughout as hasty pudding; and in this there is self-developed, or spontaneously generated, a nucleated cell, which is the opposite of that from which it was generated, inasmuch as it has Form, — that is, a difference of parts, and these parts having a relation to each other, while the protoplasm was formless. Each cell then develops and pushes off from itself, by a sort of fissiparous generation, other cells, each differentiated from, and therefore, the opposite of, every other, and of the parent cell, and thus becoming the distinctive

elements and seminal principles of the several heterogeneous parts and organic compounds which finally constitute one animal economy.

Take another example from the science of mechanics. Every planet, in its revolution round its primary, is held and propelled in its orbit by the union and counteraction of two opposite forces, the centripetal and centrifugal. By the former, the action of gravity, it is constantly drawn towards the centre; and by the latter, the tangential force, it is always striving to fly off into distant space. And the union of these opposite tendencies is the single force which keeps the body perpetually whirling in its appointed path, while the elimination of either would instantly destroy the system. This law of the solar system is but one example of the universal principle in Mechanics, which is usually called the parallelogram of forces, whereby any force whatever may be decomposed into its equivalent, two other forces which counteract each other as to the lines of direction on which they act, since these two lines meet at an angle, and thus form two adjacent sides of a parallelogram, of which the original force is the diagonal.

I have already mentioned two geometrical examples: first, that although convergence is the contradictory of divergence, the same two straight lines inclined to each other both converge and diverge; converge from A to B, and diverge from B to A; and secondly, though convexity is the contradictory of concavity, the same curved line is both convex and concave. Then two contradictories, instead of being incompatible with each other, are but two aspects of one and the same truth.

Take a theological example in the doctrine of the Incarnation. God, as infinite, is the contradictory of Man, as finite; therefore, God can be reconciled to Man only by God becoming Man, the two natures, finite and infinite, human and divine, becoming one in the person of our Lord, who is both God and Man. Of course, the doctrine of the Trinity is but another aspect of the same truth.

These are miscellaneous examples taken at random; but they are enough to show that Hegel's logic, or, as he calls it, the Immanent Dialectic of pure thought, is an instrument of wide range of application, and fertile in effecting new and striking combinations of ideas. But we have now to make a systematic use of it in the series of evolutions through which the universe of realities is developed from nothing into distinct consciousness.

We begin, as already stated, with the Absolute Idea of Pure Being, which, as absolute and universal, is entirely vague and in-

determinate, having no quality or attribute whatsoever wherewith to be distinguished from any other being, and therefore potentially including all other being within itself. It corresponds exactly to the definition of universal Substance by Spinoza, from whom Hegel probably borrowed it, as that which exists in itself and is conceived for itself, and therefore can be conceived without presupposing a conception of anything else. As Being, it is the opposite or contradictory of No-being, or Nothing; and yet, as perfectly vague and indeterminate, having no attribute whatever, it is identical with Nothing, from which it cannot be discriminated in any respect. *Nonentis nulla sunt attributa.* Here, then, we have a synthesis of two contradictories. How can their union be explained? By the notion of *becoming*, through which one passes into the other. As Being is the same with Nothing, the truth of Being, as well as the truth of Nothing, is found in the *union* of the two, or in fusing one into the other; and this union is found in the one *becoming* the other. Thus, we may ask respecting "the sunset," whether it consists in the presence or the absence of the sun. In fact, it consists in neither; for if the sun is still above the horizon, sunset is not yet; and if it be below the horizon, the sunset is past. It consists in the passage (the Becoming) from one to the other. In like manner, water *becomes* ice; but so far as it is water, it is not ice; and so far as it is ice, it is not water. Water, therefore, becomes not-water, and ice becomes not-ice. Thus the process of *becoming* is the union of *is* with *is not*, or of a particular mode of existence with the negation of that mode.

To conceive Nothing as *becoming* Being, is to conceive *creation;* and to conceive Being as *becoming* Nothing, is to conceive *annihilation.* As the result of a synthesis of two factors or elements must be more determinate (since it can now be defined as the union of the two) than either of these factors taken singly, the creation of Being out of Nothing is properly the creation of *existence* (*Daseyn*), which is *determinate being*, or, as Dr. Stirling chooses to render it, *So-being*, — Being in some determinate form or manifestation, rather than in any other. Thus, as the beginning of thought attempting to become definite and fixed for itself, we have the genesis of one of Kant's first Categories, *Quality*, through which alone any one existence can be discriminated from another. But this assumption of Quality gives me forthwith a conception of *one* thing as distinguished from others, and is therefore properly the conception of Unity; that is, Quality immedi-

ately passes over into its opposite or "other," *Quantity*, the second of Kant's Categories. Again, Unity can be conceived as Unity only through being discriminated from its contradictory, Many or Plurality. But the contradiction between them is immediately resolved, and one passes over into the other, or *becomes* the other, when we consider that Many or Plurality is only an aggregate of Units or Ones, these not differing from each other. The Many, therefore, are One, and the One is equally Many; and the synthesis of these two is definite quantity, or Number. As mere Quantity, this has no Quality, but relates only to *Magnitude*. Then, again, Magnitude presents itself as the union of two contradictory Quantities, namely, Discrete, in which the units are distinguishable, and Continuous, in which they are homogeneous and flow into each other; yet this contradiction is immediately resolved, and the two opposites become identical, when it is considered that Continuity cannot be thought without Discreteness, (for example, the table is so many distinct feet in length,) nor Discreteness without Continuity, the distinct units being added together as one Magnitude. Thus we obtain definite or limited Magnitude, which is the *quantum*, or "How much." This is *extensive* Magnitude, as Number, the opposite of which is *intensive* Magnitude, as Degree. In this notion of Degree, which is conceived as the relative amount of some one attribute or power, Quantity returns to Quality; and the union of Quantity and Quality is Measure. Then Measure, or Proportion, is a qualitative *quantum*, the Quality depending on the Quantum, or "How much" of the power or attribute is present. For instance, add a certain amount of heat, and ice becomes water; add a farther amount, and the water becomes steam. Then the different Qualities of ice, water, and steam depend on the relative Quantity, or Measure, of heat. But again, the Quantity and Quality of any definite thing can be distinctly conceived only as resulting from its Essence, or that internal constitution of it on which we suppose all its attributes to depend. For instance; as we conceive the Essence, or internal constitution, of oxygen to differ from that of hydrogen, the latter manifests less weight and more volume than the former, these being *quantitative* differences; and while hydrogen appears inflammable and incapable of supporting respiration, oxygen maintains combustion and supplies the vital part to the breath, these being differences of *quality*. Change the Essence of either, and you will thereby change both its quantitative and qualitative characteristics.

And here let us pause for a moment to take breath, and review

in thought the bewildering phantasmagoria of abstractions that we have traversed. The discussion is abstruse, for it is concerned exclusively with the highest abstractions and generalizations which the human mind can form; and it is repulsive, owing to the ceaseless repetition of one uniform process, contradictories and syntheses perpetually succeeding each other, one set of them being included in another, like a nest of chip-boxes. One tires of eternal trichotomies, the perpetual recurrence of which reminds him only of the old-fashioned game, the frequent burden of which was a triumphant "tit, tat, too!" But the process is by no means unintelligible, and it has an imposing air, owing to the novelty and seeming universality of the method employed. Let me endeavor to illustrate the method, then, by adopting more familiar phraseology.

The word "thing" is the most comprehensive substantive which language furnishes, since it includes *every* thing and *no*-thing. But on account of this very universality, we cannot *think* it, we cannot form any definite idea of it; since there is nothing from which it can be discriminated, for it includes every thing, and it cannot have any quality or attribute whatsoever, the possession of which distinguishes one thing from another. Now let us endeavor to *think* "thing," by investing it successively with the most comprehensive of all attributes, proceeding from these, step by step, to those which are less comprehensive, thus approximating by regular degrees to the conception of some *one* "thing," which, as having numberless attributes, is thereby distinguished from every other "thing." We will first suppose "thing" to possess *quality* in general, *any* quality, since the possession of any one distinguishes an *existing* thing (*Daseyn*) from that which may be either existent or non-existent, — Pure Being (*Seyn*). Next, we may suppose it to possess *quantity* in general, or *magnitude*, in either one of its three forms, as (1) more or less (Magnitude in general), (2) as one or many (Number), and (3) as more or less intense (Degree). As "things" now differ from each other in *quality* and *quantity*, we must conceive this difference to result from some difference in their internal constitution, nature, or Essence; as when we say, it is the nature or essence of iron to be hard and malleable, and of hydrogen to be aëriform and combustible. This conception of "Essence" marks the precise "Moment of the Process," or stage of development of the Absolute Idea of "thing," from absolute indeterminateness and universality to definiteness and particularity, at which we have now arrived.

Furthermore, this "Process" necessarily takes place by way of

trichotomy, that is, by the successive evolution of "differences," (which Hegel chooses to call "contradictories," though more frequently they are only "contraries,") and then by the reconciliation of these "differences;" that is, by the union or synthesis of the differentiating attribute with the "thing." Of course, when the whole end and aim of the "Process" is to differentiate and distinguish "thing" in general into some one "thing in particular," we must *proceed* by the successive assumption of differences, or "contradictions," and by the union or synthesis of the attributes, which are the bases of these "contradictions," with the "thing." "Trichotomy" is only a name for the mental process whereby we assign in thought any predicate to any object of thought; but it is a forced and awkward analysis of that process, a contemplation of it under one of its least familiar aspects, in order to justify the use of such an appellation.

Any one who has followed intelligently the exposition thus far really understands Hegelianism, — understands it in all its principles and essential characteristics; for what I have now stated is Hegelianism in a nutshell. All that remains is to carry out the system into a countless multitude of details, every thing in nature and every object of thought, every department of science and art, every chapter of history, philosophy, and theology, being obviously susceptible of what I may call analysis by the trichotomic method; or in other words, of *becoming* more and more definite in thought by the successive assumption of attributes, — that is, of differences or "contradictions." With a plodding industry, a mastery of details, and a facility in dealing with the highest abstractions of human thought, which are truly German, for they are thoroughly characteristic of his countrymen, Hegel has applied the system throughout the length and breadth of the land; in eighteen solid octavos, he has carried it, so to speak, into every nook and crevice of reality and thought. It has an imposing air, owing to its vast reach and comprehensiveness, its applicability even to the minutest details, the formidable array of abstruse technicalities in which it is enveloped, and the systematic manner, the perfect precision and order, with which it is applied to the successive grades of abstraction and generalization with which it deals.

Then, too, it is not so very marvellous that Hegel should develop every thing *out of* the Absolute Idea, seeing that he had previously, with great care, laboriously packed away every thing *into* it. He had so framed his definition of "Pure Being" in the outset, that it obviously included *all* being; and he had also, in

the "Phenomenology," as we have seen, elaborately attempted to prove that the particular, the concrete, and the individual are only the Universal in disguise.

It seems almost like pricking a Titanic soap-bubble, to point out the one unauthorized assumption, and the single, though simple and plausible, analysis of a logical process of thought, which form the narrow premises, the sole but insufficient foundation, on which the whole theory is based. All beyond and above this is a jargon and jugglery of repulsive technicalities and minute details. The one assumption is — absolute Idealism, that Thought and Being are identical, or that Things exist only in Thought. Certainly it is easy to explain the process, and repeat the act, of creation, when there is nothing to create, except an evolution of thought from itself; and the single and simple analysis of this evolution is contained in the *dictum*, that *all predication is trichotomy;* in other words, that whenever we predicate an attribute of a subject, we deny, or contradict, that subject, because we affirm of it a difference or contradictory of itself; and of course, the more determinate subject, which is the result of the predication, is a reconciliation or synthesis of the two contradictories. I call this a mere juggle of words; for it is pure verbal fallacy to assert that the judgment "A is B" contradicts A, by maintaining that A is no longer A, but is B.

To apply the system, as Göschel, Bauer, Daub, Marheineke, Strauss, and a host of others have done, to the gravest realities, the fundamental facts and highest truths, of ethics, politics, and theology, is mere paltering with words, and seems too much like mockery and blasphemy combined. Up to the time when "the Master" died, in 1831, he and his disciples carefully avoided any open breach with the positive dogmas of religion; and thus arose the well-founded belief, that there were in the Hegelian school two sorts of doctrines, the one exoteric, for the public at large, and the other esoteric, for the initiated; and that the latter contained the most thorough-going skepticism, or the denial of all the positive truths of religion. And this belief was supported by the evident ambiguity of Hegel's philosophy, which contains in itself both a principle of conservatism and a principle of progress or reform. According to the former, all the fixed dogmas of the Church, which constitute the orthodox creed, are and must be right and true; for they are a necessary "Moment of the Process," a necessary stage in the self-development of abstract or pure Thought. In a certain sense, in this, as in every other, system of fatalism, Pope's version of the Leibnitzian doctrine of optimism holds true;

"whatever is, is right." "To the same purport," says Menzel, "the notorious proposition of Hegel, 'All that is Real is Rational,' is made use of to show that the present condition of things is absolutely the most rational, and that it is not merely revolutionary, but eminently stupid, foolish, and unphilosophical, to take exceptions to it." On the other hand, the system declares that any dogmatic creed is *only* a "Moment of the Process," and therefore is to pass away, and be followed by farther developments of thought, higher truths, which will take their place. What these higher developments are the young Hegelians taught us with a vengeance, after the death of "the Master," when Feuerbach, Bruno Bauer, Arnold Ruge, and others, preached the baldest infidelity and red-republicanism under the name and garb of philosophy.

The baseless assumptions which are involved in the initial steps of Hegelianism are ably pointed out by Trendelenburg. Pure Being constitutes the first step: and this is equivalent to Nothing, because it has no attribute or quality whatsoever whereby it can be distinguished from anything. Then it must be inert, motionless, and unchangeable. To endow it with any principle of motion or change, and thus to render it capable of *becoming* any determinate existence, would be to take it out of the category of *Pure* Being. Then it cannot *become;* it is incapable of heterization; it cannot either evolve "the other" from itself, or bring "the other" again into harmony with itself, through reconciling the contradiction between them. It must forever continue to be that to which it was equivalent at the outset, namely, Nothing. And the same difficulty emerges, if Pure Thought is regarded as the beginning of the Process, for this also, because it is "Pure," is wholly vague and indefinite, possesses no attribute whatever, and so cannot change, cannot *become* any particular thought. In order to render it capable of self-development, Hegel endows it with an internal principle of activity, an "Immanent Dialectic;" but he fails to see that it thereby ceases to be "Pure," and therefore is no longer "the absolute" beginning of things. In this dilemma, indeed, all these ambitious systems are involved. What they suppose to be primal, to be the origin of all being, either has no distinguishing element, and therefore cannot *become* anything more than it was at the outset; or it must contain within itself a definite seminal principle, by virtue of which it is necessarily developed into the particular modes of definite being which now constitute the universe. To endow it with such a principle is already

to create the universe in germ, through the agency of some unseen Power; and we might just as well suppose that Power to preside over and effectuate each step of the evolution. We are thus brought back to the truth already enunciated, that nothing can be *evolved* which was not previously *involved.* When the materialists say, that the atoms of the primitive fiery mist are the source of all forms of life, they must believe either that these atoms are homogeneous and indeterminate, and so have no tendency to evolve any one mode of existence rather than any other, or else that they were so constituted at the outset that all living things are necessarily developed from them; and this is only St. Augustine's theory of potential and derivative creation.

But it is time to go back to the point where we left Hegelianism, and to trace a few more steps of development of the Absolute Idea into concrete and phenomenal being. We had advanced as far as Essence, which is conceived as that internal constitution of things, of which their outward qualities and quantity are only the manifestation. Hence, it is a sort of inward or reflected being, so called from the analogy of light, which in its straight course impinging on a mirror, is thrown back or reflected from it. We *see* only the reflected ray, not the incident one, which comes from a different direction. Thus, we conceive Matter as a single and homogeneous substance, which appears under a variety of forms, but always preserves the identity of its Essence. Hence, when we propose to study the Essence of anything, we regard its outward visible form, of which the senses directly take cognizance, as only the rind or veil behind which the Essence is concealed. Hence, again, all things have a sort of double being in thought, of which the outer one, that is merely apparent or Inessential, is manifest to sense, while the inner one, the real being, is discerned only by reason. And yet, though these two, the Inessential and the Essential, are the opposites or contradictories of each other, each can be conceived or known only through the other, and each is therefore Essential to the other; for the Essential only *is* in relation to the Inessential. This mutual relation between them is what we have termed *reflection*, or reflected being. Therefore, all characters which are such that each is incogitable without the other (such as positive and negative, inner and outer, antecedent and consequent, identical and different, thing and quality, matter and form, force and energy or the operation of force,) are determinations of this reflection or duality of being.

Essence, as Leibnitz acutely remarks, belongs only to species and

genera, that is, to classes of things, not to individuals. Accident or sickness may change my complexion or my weight; fever or a contusion may deprive me of reason and memory; apoplexy may leave me even without feeling. Hence, if asked whether it is essential for me to have reason, I answer, No. But to "Man" in general, reason *is* essential, since it is a distinguishing attribute of humanity. Hence also, says Leibnitz, individuals may change their species; a man may become a brute.

The contrariety of any two of these opposite characters mentioned above is reconciled in the notion of *Ground*, from which they both proceed. There is a common Ground, substratum, or Cause, on which the Essential and the Inessential, the real and the apparent, the inner and outer being, the Matter and the Form, alike equally depend. The Force can be explained only by the Energy or being put into operation, the Energy only by the Force. The identity of the two, of inner and outer, force and energy, essence and manifestation, is *actuality*, that which *is*, as distinguished from the merely possible or contingent, and from the necessary. What is necessary, regarded as its own *ground* or origin, is Substance; what is merely accidental or contingent is the Qualities, which are only transitory affections of the Substance, mutable phenomenal forms, the waves in relation to the water of the sea. Thus, to recur to a former illustration, water, ice, steam, mist, cloud, are only various phenomenal manifestations of one and the same Substance, which may exist successively in each of these forms, and, throughout all of them, is always at bottom the same, a compound of oxygen and hydrogen. This relation of Substance to its phenomena may be otherwise conceived as Cause and Effect, the Substance causing or producing its sensible Qualities, and the accidents being the effects of the Substance. But in this relation, the same matter is twice posited, once as Cause and once as Effect. I push against the table, but at the same moment, and in the same degree, the table pushes against me. Action and reaction are equal; each is equal to the other, and each is conceived successively as the other, as Cause and as Effect. There is no effect without counter effect, no action without reaction. This is the category of Reciprocity, in which the duplicity of Cause and Effect, Essence and Manifestation, has collapsed to unity. And this unity of the inner and outer being, the Essence and its visible form, is the Notion, or Concept, that we form of a thing. Thus, my Notion of *man* includes both the internal essence of humanity, that which

makes him "man," and his outward visible characteristics, a two-legged and two-handed animal without feathers.

Observe how far we have now advanced, through the idea of Being, and that of Essence, which is its correlative and reflection, to the entire Notion or Concept of a thing, which includes them both. It is but following a similar evolution to trace the development of the Notion through its subjective and objective forms, — the thought, and the realization of that thought in external things, — to the Absolute Idea again, which appears as the unity of Cognition and Life, of the Idea or plan of the species, and of the species as embodying in outward form and actuality the Idea. God's idea of creation is expressed in the universe; and it is only putting the same truth into other words, to say that the universe is the realization of the divine Idea. Thus we have two branches of the system, the first being a "Philosophy of Nature," according as the Idea has passed out into external reality as "the other," or contradictory, of itself, and the second, when, returning into itself, and becoming more fully conscious of itself through its opposition to Nature, it establishes a "Philosophy of Spirit." Both these "philosophies" are very ingeniously worked out by Hegel himself; they manifest great fertility of imagination and richness of thought, and abound with broad and striking generalizations, which may well be termed splendid sophisms, as they amaze and stun the student, without convincing him. Without entering into details, a few sketches will be enough to show the outlines of the two systems.

As outward Nature is a departure of the Idea from itself into the contradictory of itself, it manifests, especially in its lower forms, tokens of the absence of Spirit or Mind, such as a sort of hap-hazard character, great variety, irregularity, and lawlessness appearing in many shapes, which can with difficulty be reduced to system and principle. It first appears as a mere chaos of shapeless rocks, earths, minerals, and water, confusedly hurled together, and even in its lower essays towards vegetable and animal life, branching out into a countless multitude of fantastic forms, as if it were trying its "'prentice hand" at every thing and anything. It often confounds the lines of demarcation between species by meaningless variations, monstrous births, *lusus naturæ*, and the like. Nature, says Hegel, is a Bacchantic God, uncontrolled by, because unconscious of, himself, and therefore revelling in wild sports, regardless of law. Science is often obliged to compound with it, as it were, and to accept its products as imperfect reali-

zations of the speculative ideas which it is the office of Science to establish. The progress of Nature, its advance from lower to higher forms, is a record of struggles upwards, from shapeless, wild, and disjointed modes of being, to more complex and uniform results, to a nicer balance of opposing forces, and a final symmetry, order, and precision which mark the reign of mind. Inorganic inert Matter is its lowest form; and this has but one trace of mind and unity, the law or *nisus* of gravitation, through which all its particles tend towards one centre, the centre of gravity, and in so doing are organized into unity, as in the solar system. In this, the periods of revolution are reducible to mathematical laws, and thereby the real becomes rational. Time and Space, which lie at the bottom of these mathematical laws, are not, according to Hegel, merely ideal factors, but contribute reality to the result. Thus, for example, a tile or slate, if only placed upon a man's head, will not, from the mere action of gravity, kill him; but if such a tile or slate falls upon him from a considerable height, as from the roof of a house, the blow will be mortal. Next come Physics, in which not merely quantitative relations are considered, as in Astronomy, but qualitative conditions necessarily come into view; we have here to regard, for instance, the differences between the solid, fluid, and aëriform states of matter. In Chemistry, again, all the characteristic properties of different substances change on the application of various reagents, and thus exhibit their inessential and fleeting nature as such, and so demonstrate the possibility of matter passing into higher forms.

In living organisms, the chemical and vital forces hold a divided empire, and struggle against each other, the animate body resisting the chemical process during life, though minute portions of it are perpetually relapsing under the action of this antagonistic force, and the whole is finally abandoned to it at death. As life, the Idea passes through three distinct stages. First, in geological forms, it is only the result, the petrified remains, of a former life and process of formation. "The earth of geology is a gigantic corpse." Next, in vegetable life, the vital processes of growth, assimilation, and reproduction are complete, but the whole is, as yet, only an aggregate of parts imperfectly articulated into each other. Any one of the parts may be metamorphosed into any other, so that the leaf is potentially the whole organism. Every branch perfectly represents the entire tree. Lastly, in the animal kingdom, there is perfect intussusception, all the parts are mutually ends and means, each living only through the coöperation of the

others. Here, too, we first have spontaneous movement, sensation, and, in the higher forms, voice and internal warmth. And in its highest type, in Man, the spirit that works in Nature attains its culminating point, in the conscious unity and individuality of each living soul.

We thus come back to Spirit, the Philosophy of which has still a series of stages to describe before the merely animal soul, subject to all the skyey influences, affected even by climatic differences and peculiarities of geographical type, can fully liberate itself from the operation of these purely physical causes, and rise to that universal or rational self-consciousness, which has been all along its goal. Through Sensation and Feeling, which are but the blind gropings of unconscious individuality, the Subjective Spirit emerges at last to a cognition of itself as the Ego, which is the first step to Consciousness. Then, by distinguishing itself from Nature as the Non-Ego, and thus opposing itself to all objective existence, you and him, and other forms of humanity included, it recognizes itself as the free or universal Ego, and thus becomes, first, Theoretical Spirit or Intelligence, and secondly, Practical Spirit or Will. Then, in its attempts to carry out its own ideas into action, or to objectify them, it manifests itself as Objective Spirit, and thus lays the foundations of Legal Right, of Morality, of the Family, and the State. Finally, recognizing the identity of the two, and thereby reconciling the contradiction between its own Subjective and Objective manifestations, it advances to the stage of Absolute Spirit, which finds its three forms of expression in Art, Religion, and Philosophy.

Here, then, is the bond of union, through which Hegel is enabled to speculate at large in the broad fields of History, Ethics, and Politics, of Art, Religion, and Philosophy, manifesting everywhere his unrivalled capacity for acute distinctions, novel theories, and broad generalizations, and still always directing his theoretical views by the principles of his own peculiar method, and forging them together into the unity of his system. This sketch of his philosophy cannot be carried farther without entering into a multitude of details, which, for the very reason that they are details, can be fairly appreciated only by those who have patience enough to follow them in Hegel's own words.

CHAPTER XXI.

Arthur Schopenhauer. I.—The World as Presentation and Will.

Though the metaphysical system of Schopenhauer has at last, after remaining for forty years in neglect and obscurity, obtained much influence and reputation in Germany, and though his publications show more literary and speculative ability and brilliancy than the writings of any of his German contemporaries, I hesitated long before introducing any account of them into this work. To analyze them, even for purposes of censure and refutation, seemed too much like promoting the dissemination of evil. For not only is much of his philosophy unsound and pernicious in tendency, but the writer himself was eminently a bad man. I speak of him only as he appears in his written works, and in a biographical sketch of him published by one of his admiring disciples, Dr. William Gwinner, who attended him in his last illness. He may have shown some respectable or amiable qualities in private life, though there is no evidence of the fact, and it is hard to believe there was any element of good in him. In his books, he appears as a misanthrope, a pessimist, and an atheist; a hater of this world and of everybody in it, and one who believed in nothing except his own merits, and the injustice with which he was treated by his contemporaries. In my opinion, the world treated him just right; it passed him by with silent reprobation and neglect. This was not at all what he wanted. He would have welcomed open abuse and any measure of noisy hostility; for he craved notoriety, and was justly confident of his power to shower mud faster than any of his adversaries. But that people should take no notice either of him or his books irritated him almost to frenzy. Inordinately self-conceited, arrogant, irascible, and suspicious, his whole career was that of a literary Ishmael; his hand was against everybody, and, in a sense most galling to his pride, everybody's hand was against him; for everybody slighted him.

Then why take any notice of him here, since he died in 1860,

and the world is well rid of him? Because, like Balaam, he often spoke the truth unwittingly, and, as it were, in spite of himself. The man had a positive genius for literature and metaphysics, though unquestionably it was an evil genius. Luckily, also, the the worst part of his doctrine, though it was his favorite part, is weakest, and cannot do much harm to anybody. But there are also many good things in his philosophy, though he put them there by mistake. These we can pick out, and leave the bad alone. He has often taught what is good and right, though most frequently with an evil purpose. In paving the way for his ultimate conclusions, which are often untrue and even diabolical, he has stumbled upon many intermediate truths of great moment, and has defended them with more wit, vigor, and originality than were ever expended upon them before. After the character now given to him, I am almost ashamed to add, that I have read his works not only with more interest and amusement, but in many parts positively with more instruction and delight, than those of any other metaphysician of this century. His very impudence and recklessness are sometimes an advantage, as they enable him to tell his mind with a vigor, raciness, and *naïveté*, which a conscientious thinker could never rival. Like the man "who spoke right out in meeting," he often blurts out the truth with a directness and simplicity which render it ten times more effective than if warily uttered, and in fit season. He detests the whole tribe of German Professors of the Absolute, especially their leaders, Fichte, Schelling, and Hegel; and as he is a hard hitter in controversy, he often does good service to truth by demolishing some of their paradoxes. Far from dissecting their theories at length, he pours upon them a volley of invective and abuse for their affected obscurity, their inordinate use of technicalities and abstruse phraseology, and their general disregard of common sense. As a master of style, of literature, wit, and sarcasm, he is not only without a rival in Germany, but I hardly know his equal anywhere among writers of the present time. Macaulay is not more successful in ridiculing a theory, or Voltaire in demolishing an opponent. He writes more like a Frenchman than a German, with inimitable force, clearness, and precision, and with a wide range of illustration from every field of literature and science. It is a fact strangely illustrative of the state of literary taste in Germany, that writers, like Kant, of singular clumsiness, obscurity, and want of force, or, like Hegel, darkening counsel by abstruse formulas and repulsive technicalities, should soon have

found there hosts of admiring disciples, while one of the most brilliant writers of the age hardly obtained a follower, or even a reader, for more than thirty years.

Arthur Schopenhauer was born in 1788, at Dantzic, where his father was a respectable and wealthy merchant, and his mother a most prolific writer of third-rate novels, which obtained considerable popularity in Germany, though they had no reputation elsewhere. During his youth, he resided for several years both in France and in England, and there obtained the intimate knowledge of the literature of both these countries by which he was afterwards distinguished. Part of his university course was spent at Göttingen, where the lectures of Schulze, author of the "Ænesidemus," awakened his taste for metaphysics. By Schulze's advice, he first applied himself exclusively to Plato and Kant, whom he ever afterwards acknowledged as his masters, while he slighted Aristotle and Spinoza, then much studied in Germany. In 1811, he removed to Berlin, attracted by the lectures of Fichte, whose course he followed, though he soon learned to regard the *Wissenschaftslehre* with derision and contempt. The war interrupting his studies at Berlin, he finally took his degree at Jena, where he offered as his academic thesis the very able dissertation, which he afterwards published, on the Fourfold Root of the Principle of Sufficient Reason. A sketch of the doctrine of this essay has already been given in the chapter on Freewill. He then spent four years in Dresden, and, at two different periods, five years in Italy, seeking relaxation from metaphysical pursuits in the study of art and Italian literature. As his circumstances were easy, his perceptions quick, and his memory good, he was enabled to gratify his tastes to their full extent; and he certainly qualified himself for literary and philosophical pursuits by a broad and accomplished culture. Perhaps the consciousness of his superiority to most of his countrymen in this respect fostered his natural arrogance and superciliousness. As he was never married, and a permanent quarrel separated him from his mother and sister, the only surviving members of his father's family, the want of domestic ties dried up his affections, and, when united with his lack of success in establishing his fame as a metaphysician, made him the resentful and misanthropic being which he remained till his death in 1860. A reason for his abstaining from matrimony may be found in his remark, worthy of Rochefoucauld, for it shows as much wit as selfishness, that "in our monogamistic part of the world, for any one to marry is to halve his rights, and to double his duties."

No one ever suspected Schopenhauer of any wish to do either. He does not seem ever to have had a friend, and till within five years of his death, he had found but one ardent disciple. Frauenstädt, the editor of his literary remains, was this one; and as he was a thorough sycophant, one cannot pity him much, though he appears to have been bullied without stint by the object of his fervent admiration, the merciless Schopenhauer.

As he led a solitary and unhappy life, it is not strange that he became extremely suspicious and irritable; but we are surprised to learn that he was also of a cowardly temperament, and was perpetually anxious and fear-stricken before imaginary dangers. He was wont to keep his money in the strangest places of concealment, and if roused by any sudden noise at night, he immediately grasped dagger and pistols, which he always had near at hand. While yet a student at the University, he was haunted by the fear that he was consumptive, and by the dread of being forced into military service. He was driven from Naples by apprehension of small-pox, and from Berlin by the appearance of Asiatic cholera. While at Verona, he was made miserable by a fixed idea that he had taken poisoned snuff; and he was afterwards harassed by constant fears of the loss of his property, and by the attack upon his inheritance made by his own mother. In one instance, produced by his own irritability of temper, his apprehensions of losing money by a lawsuit proved to be well founded. While he occupied furnished lodgings in Berlin, an acquaintance of his landlady caused him some annoyance, and he pushed her not very gently out of doors. In the scuffle she fell, broke her right arm, and was partially disabled for labor. She sued him for damages, was successful, and the court sentenced him to pay her an annuity for life. Unfortunately for him, she had a good constitution and lived long, so that he was compelled to bear this burden over twenty years. At last, he joyfully wrote in his diary, *obit anus, abit onus.* I should not enter into these details respecting his life and character, if they were not in some measure a key to his philosophy, if they did not furnish a sufficient reason for his earnest and persistent advocacy of pessimism.

In 1819, at the age of thirty, Schopenhauer published his principal metaphysical work, that of which all his other books, which are somewhat numerous, are mere amplifications, illustrations, and defences, — "Die Welt als Wille und Vorstellung." As soon as he had put the manuscript into the hands of the publisher, he hurried off to Italy, chuckling over the sensation which he expected it to

create by its novel and startling doctrines, the brilliancy of its style, and the ridicule and abuse which it heaped upon those who had been for over twenty years the demigods of German idolatry in philosophy. And in any other country than Germany, in France or England, for instance, I doubt not that it would have created an unexampled sensation; that men would have looked with mingled admiration and dismay upon the avatar of this portentous spirit, and that a controversy would have sprung up which would have made its author one of the most noted men of his time. But in Germany, though the especial home of metaphysics, it was far otherwise. After remaining three years in Italy, Schopenhauer returned home eager to learn what the world said of his book; and he found that the world paid no attention to it whatever. Only one notice of it had appeared in any of the critical journals, it had not found a single adversary, and probably not one person had read it through. And the neglect continued. Just a quarter of a century was still to elapse before it attained even the poor honor of a second edition; and not till 1859, when its author was in his seventy-second year, did it issue a third time from the press. And this, too, in a country where editions were multiplying every year of the principal writings, not only of Fichte, Schelling, and Hegel, but of their third and fourth rate commentators, disciples, and opponents. Schopenhauer's rage and mortification were unbounded; and I must admit that he had good cause to be angry. But like the old woman who was ducked by the mob for Jacobitism, but who persisted, at every momentary interval when she could get her mouth out of water, in crying out "Charlie yet!" so Schopenhauer obstinately continued to write and publish, as if only to manifest his hatred and contempt for the noted trio of German metaphysicians, and the stupid tribe of university professors of philosophy, teachers, and editors of critical journals, who made a continuous pother about their respective systems in a technical jargon, of which no one, who was not "to the manor born" could understand one syllable.

The fact was, that hardly anybody in Germany, at that time, read metaphysics, or wrote about them in literary journals, except students, theologians, and professors, who were mostly congregated in the numerous universities, and who had become so accustomed to the barbarous *patois* of philosophical technicalities, which Kant, Fichte, and Hegel had invented and rendered fashionable, that they could not express their thoughts in any other dialect, nor believe that anybody was a philosopher who could not pronounce

their shibboleth. These formed a poor clique of pedants, who almost justified Schopenhauer's contempt for them. They had mistaken the mastery of an abstruse and barbarous terminology for proof of metaphysical power, acumen, and erudition. When, among the world outside, there appeared a book which expressed disdain for this jargon, heaped abuse upon the authors of it and their systems, and also preached new and startling doctrines, these professorlings and their disciples affected cool contempt and ignored it altogether; — just as a competent mathematician would do, if an outsider should make a vehement assault upon the "Mécanique Celeste" of Laplace, though his language showed total ignorance of the technicalities of the infinitesimal Calculus, and even of the names of the common trigonometric functions. They forgot the just and striking remark of D'Alembert, that a good book on metaphysics cannot teach the world anything which is really new, but can only bring out into clearer consciousness, and in due order and system, what everybody knew before. He only is a competent teacher of philosophy, who can not only make himself understood by all the world, but is willing to accept all the world as well-qualified judges of the truth or falsity of his opinions.

Let us now attempt to understand and appreciate the system of philosophy put forth in this long neglected work, which has at last become notorious, and even popular. The two leading doctrines of Schopenhauer's philosophy are sufficiently indicated in the brief title of his book. First, it is a system of thorough-going idealism. "The world is my Presentation" or mental picture, — is what I represent or believe it to be; it agrees exactly with my thought; it IS my thought. The World exists *for me* only as a picture and a belief existent in my mind, only so far as it is portrayed by my thought and present to my consciousness. Schopenhauer prefers to call it, as Kant did, a Presentation, a *Vorstellung*, or *placing before* my mind, of certain phenomena or appearances. It is impossible, and even inconceivable, that it should be *known* to be anything else than it *appears* to be; and of course, an *appearance* is, from its very nature, an appearance only *to the mind* of the beholder. Make this mental picture as vivid or lifelike as you please; it is still only a mental picture. Whatever the ignorant may fancy, or the superstitious may dream, nothing is *known* to be behind it. It is *only* an appearance or Presentation. "He only is a philosopher," says Schopenhauer, "to whom this is distinct and certain, — that he knows no sun, and no earth; but is, only

and always, an eye that sees the sun, and a hand that feels the earth; and that the world which surrounds him is only a Presentation in his mind, — that is, exists only in reference to the person who thinks or represents it; and this person is himself." It is impossible that anything should be *known*, except as it is consciously known, or in other words, as it is present to consciousness; and nothing but an affection of or a Presentation to the mind can be present to consciousness.

This world as Presentation has two essential, necessary, and indivisible halves or factors: the one is the Subject knowing, and the other is the Object known. These are not two separate entities, as former philosophers have foolishly imagined, one or the other existing as Cause, and the Presentation as Effect. Subject and Object are not related to each other as Cause and Effect. The Subject does not produce or create the Object, as the Idealist supposes; neither does the Object create the Subject, as the Materialist supposes. But as I have said, the two are inseparable, being only the different aspects of one and the same phenomenon, namely, the Presentation. The Object *is* an Object only to the Subject; the Subject *is* a Subject only to the Object. In other words, a thing cannot be known without a knower; and there cannot be a knower without something known. Then they are indivisible and indistinguishable from the Presentation, being only that Presentation itself viewed on its two opposite sides; just as convexity and concavity are the two necessary aspects of one and the same curved line, being only that line viewed from one side or the other. Just so there is no Object known apart from the Presentation of it; neither is there any Subject knowing apart from the mental picture presenting the Object known. In one word, Subject and Object are both merged in the Presentation, which is *both* what appears, and that to which it appears.

It can easily be shown that the existence of an Object without a Subject, that is, of any material thing or any physical event outside of consciousness, and without any mind to behold it, is an arbitrary hypothesis; for such an existence is not even a *phenomenal* fact; it does not even "appear to be;" and therefore real being, or actual existence, cannot reasonably be predicated of it. In like manner, argues Schopenhauer, the existence of a Subject without an Object, that is, of a mind without anything presented to it, is an equally indefensible hypothesis. As I cannot be conscious, unless I am conscious of something, *i. e.*, of some Object, a Subject without an Object would be a mind without consciousness, the ex-

istence of which is not merely an arbitrary supposition, but one destitute of any proper meaning. A Subject cannot be presented to consciousness, for what is so presented ceases to be Subject, the very fact of presentation making it an Object. Hence, because not presented, it does not even "appear to be," so that it is absurd to suppose that it really exists. The conclusion is, therefore, that we have no experience whatever of the existence either of mind or matter; experience teaches us nothing whatever but the existence of Presentations. Hence, the world is my Presentation. And as this is true of the Present, it is, so to speak, still more obviously true both of the Past and Future; for they, confessedly, exist only in my thought, as my Presentations; at the present moment, as all admit, both are non-existent.

A more sweeping system of Idealism than this can hardly be imagined. But for the other and better half of Schopenhauer's doctrine, *the World as Will*, which will be considered hereafter, it would be thoroughgoing Nihilism. But the theory as thus far expounded certainly seems to invite this criticism or parody. Any pair of correlative terms may thus be made to annihilate each other. For instance: a husband is a husband only in relation to his wife, for, without her, he would not be a husband, or would not exist as such. In like manner, the wife is a wife only in relation to her husband; for, without him, she would not be a wife, that is, she would not exist. Then neither exists as a person or *thing in-itself;* but all which really exists is the ground of the relation between the two, or the abstract idea of Matrimony. This is not merely a parody of the system; but it is a corollary, a legitimate, though ludicrous, application of it to a particular case, as Schopenhauer himself would acknowledge. For since his theory annihilates not only the Object known, but the Subject knowing, he actually maintains the unreality, the non-existence, not only of the outward universe, but of all individual minds. He leaves nothing really existing but the one Presentation, or mental picture, which is present at any one moment, and *only for that moment*, to consciousness; for, he declares, this is the single fact attested by experience; and he stoutly affirms that his system is a philosophy of experience. Like Hume, he annihilates both matter and mind, asserting that one distinct perception, or mental image, is the only actually existing thing, and that no real connection can be perceived between any two of these images existing at successive moments, or at wider intervals. This doctrine ought to be called the Presentation philosophy.

It should be mentioned, that it is only the post-Kantian metaphysics, or the so-called Philosophies of the Absolute, that Schopenhauer treats with unmitigated censure and contempt. He professes to be a faithful, though discriminating, disciple of Kant himself, declaring that his own system is built exclusively upon Kantian foundations, and only carries out to their legitimate consequences the principles developed in the "Critique of Pure Reason." Far the ablest, most searching, and, on the whole, most sensible criticism of Kantian metaphysics which has yet appeared in Germany, is contained in the first volume of "Die Welt als Wille und Vorstellung." He adopts unreservedly from Kant the doctrines of the unreality or subjective character of Space and Time, and that the Categories are mere forms of our Understanding or thinking faculty, so that they have no validity outside of their application to the *phenomenal* world. But he reduces the number of the Categories from twelve to one, that of Cause and Effect; and very properly ridicules Kant for his pedantic and almost childish love of symmetry, in tracing the analogy between Logic and Metaphysics so far as to set up just a dozen of them, divided into four equal tables, for no earthly reason but that of causing the number to coincide with that of the Forms of Pure Judgment. Schopenhauer will not admit, as Kant does, that there is any special faculty of the Unconditioned, whose only office is to conduct us to illusion and error. Schopenhauer's psychology, or division of the faculties of the mind, I think, is more judicious than that of Kant. He makes Reason to be the faculty of Concepts, or abstract general ideas; and Understanding to be the faculty of Cause and Effect, just as *Sinnlichkeit* (external or internal Sense) is the faculty of Time and Space. In other words, Reason apprehends the relations of an individual thing to its class, its Concept, or abstract general notion; Understanding discerns the relations of individual things to each other as Causes and Effects; while the Sense perceives these things in their relations to Time and Space. All abstract general knowledge comes from the Reason, which is peculiar to man; Understanding is common to him and the brutes. Cognition of the relation of Cause to Effect is the one and only function of the Understanding; and a dog apprehends this relation as perfectly as man does. For the Understanding has no power of generalization, but its functions are confined to single objects immediately known; and the man who knows that a mutton chop will satisfy his hunger, has no advantage over a horse, who practically affirms the same thing of a bundle

of hay. Practical cleverness, ingenuity, and most of the helps for "getting on in the world," depend on acuteness of Understanding; and the want of these qualities is what we usually term "stupidity." Inability to generalize quickly and correctly is what we call want of Reason, narrow-mindedness, lack of philosophical breadth and power.

But I go back to the general theory of Schopenhauer, which is evidently confirmed and illustrated by this Kantian doctrine of the purely subjective character, and consequent unreality, of Time, Space, and the law of Causation. As on the rising of the sun the visible world begins to be, so the Understanding at one stride, through its single function, converts the dumb meaningless Sensations into perceptions of outward objects and events, giving to the former an imaginary locality in unreal Space, and to the latter a supposititious position or date in unreal Time. What the eye, the ear, the hand feels, these are not perceptions; they are only data for perception. First when the Understanding, in the exercise of its single function, passes over from the Sensation, as an Effect, to its supposed Cause in an external thing, does the world begin to be, as a perception spread out in Space, changing in regard to its form and attributes, but persistent through all time in respect to its Matter; for it unites Space and Time in the Presentation of Matter, that is, of actuality, actual existence, or that which *acts*. Matter is only a determinate portion of Space invested with Causality, or the power to *act* in Time, as in its supposed attributes of impenetrability, attraction, and repulsion. Hence we cannot conceive of Matter being either created or annihilated, that is, of its quantity being either increased or diminished; for the constituent elements of Matter, namely, Time, Space, and Causation, being necessary Forms of the mind, exist indestructibly in the mind, and can neither begin to be nor pass away. This world is a Presentation only through the necessary forms of the Understanding and the faculty of Sense, and only *for* the Understanding and the Sense; that is, through the laws of Cause and Effect, and those of Space and Time.

Time, Space, and Causality are forms, each of only one class of Presentations; Time of what is Internal, Space of what is External, Causality, or Force, of Matter. But the falling apart into the two factors, Subject and Object, is a Form common to all Presentations, and belongs to their very nature. Indeed, pure Time and Space, not occupied by objects or events, are mere blanks; they cannot as such be perceived by Sense nor constructed by the Im-

agination. Only so far as they are occupied by Matter, do they become perceptible and imaginable; hence, Matter may be defined to be the manifestation or objectivity of Space and Time; and of course, it is as unreal as they are.

Still further: Time and Space are not only conditions of all reality, so that, without them, no real existence is possible, but they are *principia individuationis*, principles of *individual* existence, without which no separate or concrete being is possible. Except as viewed under these universal forms of Sense, all that now appears as particular, concrete, and individual being, would be merged in the universal, and would be indistinguishable from that which is both one and all, the Presentation. *This* thing can be distinguished from *that* thing, only as this occupies a different place from that, or occupies the same place at a different time. The *past* and the *future* can be distinguished from the *present*, only as the two former exist at different times from the indivisible moment which constitutes the present. Time may be compared to a circular disk perpetually revolving in a vertical plane, of which the always rising half is the *future*, and the always sinking half is the *past*. The tangential point where these two halves meet, which point is stationary and does not revolve with the rest, is the *present*. Or Time may be compared to an ever flowing stream, which forever breaks upon a rock in the midst of it, but does not move forward this rock, this being the *nunc stans*. We may *imagine*, indeed, that this tangential point is continually shifting; but so far as we *know*, it persists as one and the same; it is that which is always Present. Take away these grounds of distinction, as in the doctrine that Time and Space are mere Forms of the percipient mind, and there are no *this* and *that*, no *past* or *future*, no *you* and *I;* but only an indivisible and universal Object, an indivisible and universal *present*, and an indivisible and universal knowing *Subject*. The history of the world, as well as its complexity and multiplicity, fades away into nothingness. Of the two necessary and indivisible halves, which make up the world as Presentation, the one is Object, whose forms are Time and Space, and through them, Multiplicity; and the other is Subject, which has neither Form, — which does not occupy Space, nor exist in Time, and is absolutely one and indivisible.

That which knows all, and is known by none, not even by itself, is Subject. It is, then, the bearer or supporter of the World; for whatever exists, exists only *for the Subject*. As this Subject every one finds himself; yet only so far as he is the knower, never

as being the object known. His body, indeed, is Object, — one Object among other Objects, a part of the world; although it is his *immediate* Object, and not, like other parts of the world, or foreign matter, remote or *mediate* Object. Like all other objects of intuition, a man's own body appears to him in Space and Time, which are the Forms of all cognition, and through which alone anything appears as manifold or complex. But the Subject is not manifested under these Forms, but rather is presupposed by them; therefore, strictly speaking, neither multiplicity, nor its opposite, unity, belongs to it. We never know it, but it is that which knows all, whenever anything is known; like the eye, which sees every thing else, but never sees itself. There is one thing which never appears to me as a cognizable or complex phenomenon, or, indeed, under any Form whatsoever; and that is Myself. Every thing which belongs, or can belong, to the World, is inevitably burdened with this condition, that as it can be known only by the Subject, *it exists only for the Subject.* As there would be no light in the world, if there were no eye to see it, as there would be no sound, if there were no ear to hear it, for light and sound are only sensations in the mind, so there would be no World, if there were no Subject to know it; for Time, Space, and Causation, which alone constitute the World, and render it possible, exist only in the Subject, and are Forms of its cognition. *Esse=percipi;* existence and perceptibility are convertible terms. This is not denying the existence of Matter, which would be lunacy, but only correcting the popular notion of it.

Though perception takes place by means of the law of Causality, — that is, I can perceive nothing external except through affirming that there must be some Cause of my sensations, — the relation between Subject and Object is by no means a relation between Cause and Effect, but is rather, as I have said, only like the relation between the convexity and concavity of any curved line, the twofold aspect of one indivisible thing, the Presentation or mental picture. The relation of Cause and Effect exists only *between Objects;* primarily, between the immediate Object, *i. e.*, my own body, and other Objects foreign to it; and secondarily, between those foreign Objects themselves. Analyze the action of any of the senses, and you will always find it is the action of some other body on some part of my body, as on the retina or the tympanum; never the action of body on mind. Hence, the old contest of the Realists and Idealists, whether body is the cause of mental action, or mental action the cause of body, is foolish and

meaningless. Neither is Cause; neither is Effect. The law of Causation, like the forms of Space and Time, belongs only to the convex side of the curve, to the objective aspect of the Presentation, and to the relations of these Objects to each other *as known;* never to the concave side, or to the Subject which *knows*, but never is known, not even to itself, and so cannot be regarded under any laws or forms, simply because it cannot be "regarded" or known at all. That is not its office or function.

As Schopenhauer's philosophy thus largely depends on the subjective origin, exclusively empirical applicability, and consequent unreality, or transcendental idealism, of Time, Space, and Causality, he fortifies Kant's arguments in support of this doctrine by some very original and striking ones of his own. The law of causation, he says, cannot be derived from any external experience, for without it, as we should not know that there was any external world, no external experience would be possible. We cannot prove the existence of an outward universe except by applying the law of Causality, and saying that there must be a Cause of our sensations. But then we cannot make use of that universe in order to prove that our sensations must have a Cause; for this would be reasoning in a circle, first proving A by B, and then proving B by A. The law of Causality, then, is a mere necessity of mind or thought, to enable us *to think* that there is an external world. And when it has enabled us so to think, it has performed its office; it can do nothing more. Again, this very application of the law presupposes an *a priori* intuition of Space and Time. For Causation here means the necessary antecedence of one physical event, as Cause, before another physical event, as its Effect. Such antecedence and consequence are possible only in Time, and such events can happen only in Space.

The subjectivity of Time and Space is thus further illustrated. They cannot *be* anything, because they cannot *do* anything. Time is never a Cause, but only a Condition, of any phenomenon; only an atmosphere, so to speak, in which any physical Cause must be conceived to act. Action is motion, and motion can take place only in Time and Space; but Time and Space *alone*, taken either separately or in combination with each other, cannot *produce* motion or rest, cannot change either into the other. This is what the physicist calls the law of Inertia. A body once in motion will, if no physical cause intervenes, continue in motion in a straight line forever; the lapse of Time during its motion, though it be billions of years, and the quantity of Space which it traverses, though

it be billions of leagues, will not affect or alter its motion in the slightest degree. And so, also, if once at rest, it will forever be at rest. But the *quantum*, the relative amount, of Time and Space if they were anything real or actually existent, would necessarily have some effect, would exert some influence. Time, Schopenhauer says very prettily, flies over things, but leaves no trace upon them. It is not Time which corrodes every thing that is perishable, covers the rock with moss, draws wrinkles in the cheek, and eats away the river bank or the mountain side; but only Causes operative in Time. Shut off anything from the action of these chemical and other physical influences, as the Siberian mammoth was when enclosed in ice for geological ages, or as a fly is in amber, and it will remain absolutely unaltered forever. And as Time and Space produce no change in other things, so they suffer no change in themselves. They are equally indifferent to the presence or the absence of phenomena, of real objects or events, in them. The clock may stop, the earth may stand still in its orbit, all motion of things may cease, things themselves may be annihilated, leaving only a void Space; but Time still rolls on in its perfectly uniform lapse, and the void Space endures immovable forever. We cannot even conceive or think, that the one should ever rest from its motion, or the other ever move from its rest. In our apprehension, at least, these two things limit, or set bounds to, Omnipotence; for we cannot *think* that even Almighty power can change them.

These two things, also, are everywhere present and coexistent. Space exists throughout all Time, and Time is present at every point of Space. Wherever we go, even in imagination, these two inevitably go along with us. Now, in every other case, whatever thus persistently accompanies us, — say, a particular odor, — moving wherever we go and resting wherever we stop, we immediately suspect that it comes from our own body, that it emanates from ourselves. The ringing which I always and everywhere hear, must be in my own ears, or rather in my mind, where alone a sensation can be felt. If a blood-red image of the sun should constantly float before my eyes at the same distance, whichever way I turn my head, and wherever I go, then I immediately know that it is of subjective origin, that there is no real outward object corresponding to it, but that my own sense of sight is seriously affected. Why not reason in the same manner respecting Time and Space, which beset me so persistently that I cannot rid myself of them even in imagination or thought? They haunt me. Then

they are products of my thought, laws of my perceptive faculty, spectral sights and spectral sounds, which originate, and have their only being, in myself. That my head *appears* constantly to be *in* Time and Space, ought to prove to me that Time and Space are only *in my head.* That you resist this conclusion only shows that you are unwilling or reluctant to accept it; for I defy you to produce a single valid argument against it. But that infinite or endless Space, says Schopenhauer, Space at once immovable and indestructible, should exist in itself, independently of us, absolutely and objectively, and a mere image or representation of it should come into our minds through our eyes and other senses, is the most absurd of all fantasies; and yet, in a certain sense, it is the most fruitful of all imaginings; for he who distinctly sees its absurdity thereby recognizes the purely phenomenal existence of this world, and sees it in its true character, as a mere phantasm of the brain, which perishes with the thinking Subject who entertains it.

Having sufficiently considered "the World as Presentation," which is the first half of Schopenhauer's philosophy, we now pass to the second half, "the World as Will." The repugnance and unwillingness, he says, with which every one regards this truth, the World is my Presentation, that is, is merely a phenomenon or baseless image appearing in my mind, prove that this is a one-sided doctrine, or only half of the truth; and that we must search for the other moiety. For the question immediately occurs, Why should there be any such phenomenon? Why do we have this particular Presentation of the World as it now appears, rather than any other, say, of a World very differently constituted from the present one? Philosophy as well as common sense affirms the dictum of Leibnitz, that nothing exists without a Sufficient Reason for its existence. We must be able to tell why *this* rather than *that,* or we leave the matter short. Pressed by this difficulty, Kant, whose system, since he denies the reality both of Space and Time, is quite as idealistic as that of Fichte or Hume, found himself compelled to assert the existence of a *ding an sich,* — a real entity lying behind the phenomenon as its Ground or Reason, and thereby imparting to it its distinctive character. But as Schopenhauer remarks, this is the Achilles' heel, the vulnerable point of Kantian metaphysics; for it is a mere assumption, an acknowledgment of the difficulty, but not a removal of it. Kant is obliged to confess, in conformity with his own principles, that we do not know, and never can know, what this *ding an sich* is, or wherein it differs from the phenomenon. Its existence is af-

firmed, not for any independent reasons or grounds of its own, but only to meet the exigency of the case; and as nothing else is said about it, except that it is utterly incognizable, to affirm its reality is only to admit that such an exigency exists. The doctrine that the Unknown and Unknowable is the Reason for anything, is simply a confession of ignorance, that we do not know what the Reason is, though there must be such a Reason. Let us see, then, whether the direct testimony of consciousness will not give us some indication of what this real entity is.

If, says Schopenhauer, the inquirer himself were only a pure knowing Subject, — for instance, a winged head without a body, like one of the Cherubim, — then he could not find a way over, from a mere Presentation of the world in his mind, to a world of reality lying behind or underneath it, as its Ground or Reason. But it is not so. Man is not merely a knowing, but a *willing*, Subject; for he has not merely cognitions, but volitions, aversions, desires, and other manifestations of Will; and, what is more, he has a sentient body, his own nervous organism, which is the only *immediate* Object of his consciousness, all other phenomenal things being *mediate* Objects, since they are known to him merely through their action on his own body, and therefore through its intervention as a medium. The inquirer finds that he is himself an individual corporeal being, and, as such, that he is a part of this phenomenal world, and rooted in it, his own body being that through whose affections and sensations alone he can have any perception of all the other phenomena that lie around him. To the pure *knowing* Subject as such, it is true, its own body is itself a Presentation like every other, one Object among other Objects; and *in so far*, its movements, its actions, are known to him just as the changes of all other perceptible Objects are known to him, and would be just as strange and incomprehensible to him as they are, if their significance were not unriddled to him in a wholly different way. But this his own body is manifested to him in two entirely different modes: first, as one Object among other Objects in an intelligible perception, and thus subject to the laws of perception; and secondly, as that conscious force or power, *immediately* known to every one, which is designated by the word Will. His volitions, or the acts of Will, are not, in themselves, mere phenomena or presentations, for the very reason that they are inward *acts*, which point *forwards* to some embodiment or manifestation of themselves in outward phenomena, and not merely *backwards* to some hidden Cause, Ground, or Reason, of which they are only a

phenomenal expression. They certify their own verity, their own substantial and independent character. As to have a sensation, is to know that this sensation exists, so to have a volition, is to know that this volition exists; for it is our own *act*, and not merely an image or presentation of something beyond itself. It is known *immediately*, and as such, since it is the expression of our own inmost being. True, it immediately passes into an outward manifestation of itself, which then becomes the Object of a presentation. Every true act of my Will, says Schopenhauer, is so far, and infallibly, also a movement of my body. I cannot really *will* the act, without at the same time perceiving that the volition *appears* as a movement of my body. If I *will* to raise my arm, or clinch my fingers, at once the arm *appears* raised, and the fingers clinched. If I *will* to stand, to walk, or to sit, immediately my body *appears* to me standing, walking, or sitting. In like manner, also, every effect produced upon my body from without, as when I am struck, or warmed, or chilled, or vibrations reach the tympanum of my ear, or odors excite my olfactory nerves, — all these, in so far as they affect my body, immediately affect my Will, being called pleasurable, when they harmonize with the Will, and painful or unpleasant, when they are opposed to the Will, or are repudiated by it. It is a great mistake to regard pain and pleasure, hope and fear, and the like, as mere Presentations or images in the mind. They are not so by any means; for they have no Object distinct from themselves, of which they could be a Presentation; and it is not possible that they should be unreal or imaginary. They must *be* what they are *felt* to be, for their very essence consists in being felt. They exist in the very act through which they are felt to exist. They are a momentary and enforced willing or unwilling, acceptance or repudiation, of the impression made upon the Will. As the movements and actions of my body express and render visible my *conscious* volitions, so my limbs, muscles, and other organs, even my whole body, express and make manifest to Sense my *unconscious* volitions; they are the embodiment of the incessant activity of my Will.

I am conscious of the *foreign* outer world only once, as my Presentation; but I am *doubly* conscious of *my own body*, first as states of it express my volitions and my feelings, and secondly, as a mental Presentation of these states. In general, then, my whole body is nothing else than my objectified Will; that is, my Will become a Presentation or perception. Body and Will are one and the same thing, though given to us in two different ways. The

Will is, in a certain sense, the *a priori* cognition of the Body; and the Body is the *a posteriori* cognition of the Will. Here, and here only, we penetrate immediately and consciously to the Ground or Reason of the Presentation, to the *ding an sich*, the Will, which lies behind or beneath the phenomenon, and imparts to it its distinctive character, as *this* appearance rather than *that*, because so willed.

Now, because our corporeal being is thus given to ourselves in a double manner, immediately and mediately, internally and externally, first, in our immediate consciousness of Will objectifying itself in outward phenomena, and secondly, as these phenomena represented in our cognitive sense as one Object among other Objects, the former being the *natura naturans*, and the latter the *natura naturata*, — because of this twofold cognition, I say, it becomes possible for us to make our internal self-cognition a key to the knowledge of the universal *ding an sich*, the true Ground or Essence of all external things. Will, says Schopenhauer, is not one form or species of the genus Power or Force, but each and every Power or Force is one species of the genus Will. Will is not necessarily self-conscious, or known to itself as such; in the greater number of cases, we infer, what in several cases we directly know, that it is unconscious. Self-consciousness, knowledge as such, is only an accident of the manifestation of Will *in animals*, particularly in man; but it is not an invariable accompaniment of it even in him. In all frequently repeated series of actions, which have become easy and familiar by long practice, as in walking, riding, writing, winking, and many others, we are not conscious of the hundredth part of our volitions. Then there is an unconscious and incognitive Will in Nature, — a Will not accompanied by intellect, a universal, all-pervading Will, which is the true Ground or Reason of all phenomena, of all that appears. In the last analysis, Matter is nothing but Force, and Force is nothing but Will. Matter is only the visibility or Objectivation of Will; it is Will become apparent as a phenomenon or Presentation; and the powers of Matter are identical with the Will in us. And this Will is everywhere one and the same, a blind and unconscious God, coinciding in this respect with the one universal Substance of Spinoza. It manifests itself, indeed, to our perception, in a countless multitude of forms, and in particular concrete cases, as the impenetrability, gravitation, cohesion, attraction, and repulsion of brute or inorganic matter; as the life and principle of growth, the *nisus formativus* (*bildungstrieb*), of plants and animals; and even

as conscious and cognitive Will, in man and brute. But as we have seen, the particular and the individual are only phenomenal manifestations of the universal, — mere accidents of the subjective Forms of Space and Time. What is thus manifested is only the universal all-pervading Will objectified, or become perceptible as Presentation. It is the nature of this one Will thus to manifest itself, in various stages of development or objectivation, as Matter and Life. And it so objectifies itself *necessarily*, one form succeeding another, impulse preceding motion, thought following sensation, volitions succeeding motives, life and death coming after each other in ceaseless interchange, — all being governed or necessitated by the immutable law of Reason and Consequence, which is the universal Form under which all phenomena must present themselves to the Understanding. Thus, the world or Universe, which, in one of its aspects, is mere Presentation, on its other side, as a *noumenon* or thing-in-itself, is pure universal Will. The manner in which a volition announces itself in us, as a stretching out of the hand to take hold of some object, is only a particular sort of Will, namely, that which is directed by a motive towards a certain act; and this act is therefore called a voluntary one, in distinction from those which are involuntary or unintentional. But there is another sort of Will, on which motives, as perceived by the understanding, have no influence, but which manifests itself as a Force acting under what we call mechanical, chemical, and physiological laws, — as in the fall of a stone, in chemical actions and reactions, in the assimilation of food, and in the growth of plants and animals. But these various kinds of Will, or Force, as most of them are usually called, are only different stages of manifestation, or, as Schopenhauer prefers to say, various degrees of objectivation, of one and the same Will, which, in its innermost essence, is always identical with itself. The leading feature of the theory is, the entire separation of the Will, *as such*, from any mode of cognition or consciousness. The intellect, by which, in man, and even, to some extent, in brutes, the Will is guided, is, as Schopenhauer attempts to prove, itself only a product or creation of the Will, in the highest state of its manifestation. That which, in the lowest degree of its objectivation, shows itself in Nature only as a blind Force, when it has worked its way up to the animal kingdom, appears in a body provided with organs of sense and a brain, and now for the first time becomes self-illumined, so that it is able to will *with consciousness*. Then Will alone is primary and essential, while Knowledge is secondary, artificial, and accidental. What is eternal and

indestructible in man, says Schopenhauer, is, not the soul, but that which, to use a chemical expression, is the *basis* of the soul; and that is Will. The so-called *soul* is a compound, a union of Will with νοῦς or Intellect, the latter being a mere adjunct and implement of the former.

Spinoza says, that a stone flying through the air from an impulse which it has received, if it had consciousness, would suppose that it was thus flying from its own will. "I have only to add," says Schopenhauer, "that the stone would be right. What the *impulse* is for the stone, the *motive* is for me. What appears in the stone as cohesion, weight, and impenetrability, is, in its internal essence, the same which I know in myself as Will; and which the stone too, if it had intellect and consciousness, would recognize as Will." Spinoza, in this remark, had his attention fixed on the necessity, which he rightfully held to belong to the two cases. As the flight of the stone is the *necessary* result of its physical properties and of the impulse which it has received, so any voluntary act of man is the inevitable consequence of his character, and of the motive which is present to his mind. The only difference between the two cases is, that in the stone, Will has its lowest, and in man its highest, stage of visibility and objectiveness. Even St. Augustine recognized with keen insight this sameness with our Will in the tendencies and strivings of all things. He speaks of the *weight* of bodies as their *love* or appetite, whether they tend downwards by gravity, or upwards by levity; "for as the body by its weight, so the mind by its love or desire, is carried whithersoever it listeth. If we were stones, or waves, or wind, or flame, or anything of the kind, and so were without any sense or life, still we should not be without some appetite or longing each for our own proper place and order." And Euler also saw that the essence of *gravitation* must finally be referred to "a sort of inclination or desire" of each particle of matter toward every other particle. So two ships in a dead calm at sea, though they may have been several furlongs apart when first the wind fell, inevitably tend, strive, and gravitate toward each other, and soon, if no hindrance arises, come to float side by side with their yards interlocked.

Here is the nucleus of a great truth, which Schopenhauer clearly discerned and fully incorporated into his system; and which, when stripped of the unnecessary, and even meaningless, adjuncts that he has heaped up around it, seems to me the noblest and most truthful solution which can be given of the great problem that philos-

ophy has to solve. Matter is nothing but Force, Force is nothing but Will. Every phenomenon, every object that appears to our senses, and every change that takes place in the universe, is but the manifestation of the one Infinite Will, that first brought the universe into being, when He first made it present to the consciousness of man as a living soul. Man is the earliest work of creation, for whose moral improvement alone the outer world was fashioned and spread out in the eternal thought of God, where alone it can be spiritually discerned in its true essence. Give up the hallucination, that our volitions are necessarily determined by motives, and recognize the human Will as finally emancipated, and rejoicing in the consciousness of its Freedom, when the chain of physical causation is broken at every link, and the material universe becomes only a Presentation in human minds of the infinite goodness and wisdom of their Creator. Give up also the senseless pantheistic doctrine, which resolves the particular and concrete into the universal, and thereby absorbs man into God, and recognize, as the first dictum of consciousness, that I exist, as a separate and responsible, though not independent, being, and, as the first lesson of philosophy, that God also exists as my creator, benefactor, and judge.

"Certainly," says Schopenhauer, "Malebranche is right. Any physical antecedent is merely the Occasional Cause of the event which follows; it only marks the occasion for the appearance now and here of that one and indivisible Will, which is the essence, the inmost being, of all things. This whole visible world consists only of the successive manifestations, the objectivation in one phenomenon after another, of that one Will. The physical cause merely determines, (or enables us to know beforehand, through the uniformity of physical law,) the particular place and the particular time at which the event may be expected to occur; but it is not that which generates the event, or makes it happen. This producing Force is the essence and internal nature of all things; it is the one universal Will, which creates and sustains all, and of which the visible world is only a mirror, only a manifestation to sense. Therefore, what we call 'cause' is only the Occasional Cause." *Fas est ab hoste doceri;* either Malebranche or Berkeley might have accepted this, as a full and explicit statement of the doctrine which they inculcated with so much earnestness, — that of the immediate presence and agency of the Deity throughout the physical universe, every motion or change in it, with the single exception of human volitions, being produced directly by His omnipresent and omniscient Will.

CHAPTER XXII.

Arthur Schopenhauer. II. — Pessimism, Æsthetics, and Ethics.

The remainder of Schopenhauer's philosophy is less satisfactory in itself, and less creditable to its author, than the doctrines thus far noticed. Very curious is his depreciation of the Intellect, in order to exalt the Will as the primary and essential thing, not only in nature as a whole, but in individual minds. As there can be no Object without a Subject, he argues, so there can be no Subject without an Object; that is, no act of knowing, without something different from it, which is known. Hence, a Consciousness which should be pure intellect, and nothing more, would be impossible. The intellect is like the sun, which does not illuminate space if there be not some object there to throw back its beams. As that which knows, it cannot, as such, be known; but the only thing in self-consciousness which is really *known* is the Will. For, not only willing and determining in the narrowest sense, but also all striving, wishing, flying, hoping, fearing, loving, hating, — in short, all that immediately constitutes our proper weal and woe, pleasure and pain, — all this is an excitement or modification of Willing or Repudiating; — is that which, if it works outwardly, appears as an act of the Will. And all this we know thoroughly; in truth, it is the only part of ourselves which is known.

Now, in all knowledge, the first and essential thing is the known, not the knowing; since the former is the real thing, the prototype; while the latter is only the image in the mirror, the presentation, the ectype. Therefore, in self-consciousness also, what is known, that is, the Will, is the first and essential; but the knowing of it is the secondary, what is added, the mirror. The two are related to each other as self-luminous bodies are to reflecting ones, or as the vibrating string is to the sounding board, the tone or sound from which is the consciousness. In order to know consciousness thoroughly, we must first ask what that is which is equally and constantly present in every consciousness, since this

must be the common and essential element of it. That which merely distinguishes one consciousness from another is the accidental element of it, the merely additional or secondary.

Consciousness belongs exclusively to animal life, so that the phrase "animal consciousness" would be tautological. Now, what is present in every animal consciousness, even in the weakest and most incomplete, and which lies at the bottom of it, is the immediate being aware of a desire, and the gratification or disappointment of this desire in different degrees. This we somehow know *a priori*. It is the common feeling, that which makes us sympathize with each other, and even with brutes. Wonderfully different as the numerous sorts of animals are, however strange one of a new species among them, never before seen, may be, we still assume at once, and with confidence, that its innermost essence is perfectly well known to us; — that is, we know that the animal *wills*; we even know *what* it wills, namely, existence, gratification or well-being, freedom from pain, life, and the propagation of its species. Herein we assume its entire identity with ourselves, and do not hesitate to attribute to it all those modifications of the Will which we are conscious of in ourselves. We speak of its desires, aversions, fear, anger, hate, love, joy, sorrow, longing, etc. But as soon as the phenomena of mere Intellect come into question, we doubt. We dare not say that the animal comprehends, thinks, judges, knows. But willing and not-willing, or repudiating, are common to man and the polyp. All actions and gestures of animals which express affections of the Will, we understand, and in some measure sympathize with, because our Will is like theirs, and at bottom is even identical with it. The great gulf between us and them is the Intellect. This is a mere implement for the service of the Will, to discover the means of satisfying its desires and providing for its wants; and the Intellect, together with its organ, the brain, is more complicated in proportion to the greater demands of this service. The organism also corresponds to the animal's wants, that is, to its Will; and according as it has horns, teeth, wings, hoof, claw, or hand, it has a more or less developed brain, whose function is the intelligence required for the use of these organs. Thus, both the structure of the animal, and its Intellect or peculiar instincts, are at once the manifestation and the ministers of its Will. The more complicated the organization, the more numerous are its wants and desires, and the more developed the Intellect which is needed to supply them. Man is the most complicated of all; he needs most, he wills most, and therefore

has most Intellect. And still the real man himself is not the Intellect, but the Character — *what* he wills, and *how* he wills it, as with more or less energy and persistence.

As we have seen, all individualization is a mere outcome of Space and Time, which are subjective Forms of the perceptive faculty, and therefore have no real being in themselves. All which depends upon them, then, is mere Presentation; the particular and individual are only manifestations of the one universal Will, spectral images on the shadowy background of Space and Time. Just so, one human face, that of an orator, for instance, who is addressing a large assemblage of persons, all of whom are looking at him, is reflected and multiplied in thousands of images of itself painted on the retinas of each beholder. These images, though numerically distinct from each other, and all seemingly alive and glowing with the expression of thought, are in fact only ideal multiplications to the Sense of the *one* reality at the centre. Will primarily objectifies itself in general ideas, in genera and species; these are the only permanent forms of the world as Will. Individuals rise and pass away; they are mere fleeting phenomena; Nature heeds them not, but reserves all her care for the continuance of the species. To this end, the seeds of life are multiplied with measureless profusion; life and death succeed each other in ceaseless interchange; but the alternation is only phenomenal, for all life at bottom is one, and is the objectivation of Will. The Will to live, of which Life, or the World, is the phenomenal expression, is a mere pleonasm for the Will. Even individual organisms, as material, are rapidly fleeting forms, subsisting only by a constant process of decay and restoration. Life and death, also, are but higher forms of assimilation and excretion, of taking on and putting off life; they are only reproductions, or successive manifestations, of the one universal life or Will. We ought no more to grieve at death, than at the loss of the matter which is constantly passing away from our bodies. The matter is ever changing; the form is persistent. Individuals perish, the species endures. It is just as absurd to embalm bodies, as carefully to preserve our excrements. That individual man should fear to die, is as foolish as if the sun should fear to set, forgetting that what *appears* as dipping beneath the horizon, is merely passing on undiminished to illuminate another hemisphere. Death is a sleep in which one's *individuality*, it is true, is forgotten; every thing else awakes again, or rather, has always remained awake.

Schopenhauer makes a striking application of this doctrine in

his theory of ethics, where he bases upon it the only sort of retribution which his system admits as possible. Whatever injury I do to you, I suffer it; for you and I are one and the same being, or rather we are only different expressions of one and the same Will. He who injures another is only a wild beast who fastens his fangs in his own flesh; for the slayer and his victim, the victim and his avenger, are one; and the World is itself its own great tribunal of retributive justice. Every misfortune, pain, or disappointment which can befall a man, comes upon him with strict justice, because it is his own act; the one universal Will, which constitutes and governs the world and life, is also his own Will, and he has no individual being independent of it. In every act and every occurrence, the agent and the patient are one and the same; and thus eternal justice reigns. Could all the misery of the world be put into one scale, and all the guilt of the world into the other, the balance would remain exactly even, inclining neither way. If we would know what men are worth, on an average, in a moral point of view, — that is, what they deserve, — we have only to observe what their lot is, or what they have to undergo, in this world. This is want, sorrow, misery, pain, and death. If the human race, taken as a whole, were not so unworthy, so bad, their fate, taken as a whole, would not be so mournful.

We are thus brought to what is the crowning and most characteristic feature of Schopenhauer's system. Alone, so far as I know, among all ancient or modern philosophers, he is an avowed, consistent, and thorough-going Pessimist. To him, this is the worst of all possible worlds, tenanted by the worst of all possible beings, mankind. We have already had a sketch of the Optimism of Leibnitz, with which, indeed, most readers are familiar, as it was paraphrased by Pope, and ridiculed by Bayle and Voltaire. The caricature of it by the latter, in the story of Candide, is held by many to be the wittiest and ablest of all his philosophical writings. But not in the half-jesting, half-earnest manner of Bayle, not in the mocking and sarcastic spirit of Voltaire, not even with the dogmatic and overweening insolence of Hobbes, does the German Pessimist undertake to prove that this world is a hell, and that the men who tenant it are demons. Schopenhauer's tone is fierce, acrimonious, and denunciatory. He is a misanthrope, one who has quarrelled with the world, and hates all his fellow beings, not, as Timon of Athens did, because they had at first fawned upon, and then injured and forsook him, but because he was by natural disposition what Dr. Johnson called "a good hater." For we cannot

attribute his disgust with the world to the ill reception, or rather the utter neglect, which his writings had experienced; since his avowal of Pessimism was bold and uncompromising in the first and ablest of his works, that for which he unquestionably anticipated a great success. His tone, moreover, is not that of mortified vanity, but is acrid, bitter, and vituperative. His doctrine is an effusion of spleen, which has no better source than a bad temper and an ill-regulated intellect. He is witty and eloquent, indeed, in his denunciation of the woes that afflict humanity, and the misdeeds which have merited them. But these are natural qualities of the man and his style, which, as I have sufficiently shown, never fails to be lively and vigorous on any theme. But on this subject, the hatefulness of this world, his wit is turned to gall, and his eloquence only makes the picture more gloomy and untruthful.

The link of connection which binds his Pessimism to the other leading doctrines of his philosophy is ingeniously contrived. According to his theory, as we have seen, the Will is the *ding an sich*, the sole real existence, of which all phenomena are only the manifestation. Now what is Will? It is a constant striving, a never satisfied desire, a reaching forward to something which it has not and never can have, because the attainment of its object would be its own annihilation as Will; it would then *will* no longer, for it would possess what it had willed. Because Will is life and all things, and cannot cease to will without ceasing to be, therefore the essence of life is unsatisfied purpose, a striving to be what we are not, and to gain what we have not; and the fruit of life is disappointment and sorrow, the end whereof is death. The only possible virtues, then, are pity — pity for all other beings who are as wretched as we are; resignation or submission to the inevitable ills of life; and self-abnegation, or a renunciation of the Will to live, which is a virtual return to nothingness, — the only heaven which Schopenhauer admits as possible; and even this is possible only in thought, or as a Presentation, since the universal and unconscious Will, of which my individual existence is but a transitory phenomenon, *must* persist or endure, because its essence is indestructible. As one desire is chastised or perishes, another inevitably rises; for we must *will* even to cease to will, or, as its equivalent, to cease to be. The hindrance which, in any case, prevents the accomplishment of our desire, we call Sorrow, the frustration of hope, failure, or at best the postponement of happiness. "Man never is, but always *to be* blest."

"Victuros agimus semper, nec vivimus unquam."

But these sorrows, failures, or postponements constitute our life; for without these, we could not will, and therefore we should cease to be. We spend our life in striving to avert or postpone death, an effort which is sure to be at last a failure. Death is, not happiness, but the end, for us, of pain, toil, and sorrow. And death (for us, again, for our individual existence,) is annihilation; since the dead do not will. If we knocked at the graves, and asked the dead in them whether they wished to come back to earth, they would all shake their heads. Even the much desired immortality of the soul, as it is always the hope of "a better world," is a sure sign that the present world is not worth much. In truth, what we dread, and seek to postpone, is not so much death, considered merely in itself, or in its consequence, as a mere stage of non-existence, but simply the act of dying. No one regrets his own non-existence during the eternity which preceded his birth; and non-existence during a subsequent eternity will not concern him, since he will not be conscious of it. The only use of looking forward to it, even for him to whom it is gloomy, is to sadden the present moment with an irrational and unsatisfied Will to live. In general, both the Past and the Future are nothing to us, since the one is irretrievably gone, and the other is not yet. Both are confessedly mere Presentations, or images of what is not, since this is the nature of memory and anticipation. All that really is, is the present moment; and all that actually occupies this moment, is a desire, an unsatisfied longing, a Will. Now, as all the happiness, or rather the freedom from sorrow, which we ever have enjoyed, or hope to enjoy, belongs either to the past or future, this also is a mere Presentation, an unreal image, to which nothing *now* corresponds. Our view of existence, therefore, says Schopenhauer, is but an image or mental picture of a vast plain, on which there may be spots of sunlight, either behind or before us; but there is one spot on it which always lies in shadow; and this is all that is real, the present moment. What mockery is it to say this is the best of worlds, in which the happiest man knows no more blessed moment than that of dropping asleep, and the most unhappy no more miserable one than that of waking up again!

Out of the night of unconsciousness, the Will finds itself wakened as an individual into life, into an eternal and unlimited world, among numberless other individuals, all striving, suffering, erring; and, as if frightened by a horrid dream, it hastens back again into the old unconsciousness. Lessing wondered at the foresight and good sense shown by his son, who, because he thoroughly disliked

the appearance of this life, had to be drawn into it by force on the day of his birth; and was no sooner in the world than he made haste out of it again. Old age and death, to which we all are rapidly hastening, is a sentence of condemnation, passed by nature herself, upon the desire for life, as a blunder and a crime. "What you willed," it says, "ends thus; then will something better."

> "Then old age and experience, hand in hand,
> Lead him to death, and make him understand,
> After a search so painful and so long,
> That all his life he has been in the wrong."

These truths will appear more evident, says Schopenhauer, as soon as we perceive that only suffering and sorrow are positive; what we call happiness is merely negative, the absence of pain. Thus, we feel pain, but not the absence of pain; we are conscious of trouble and anxiety, but not of freedom from them; — of danger, but not of security. We are not even conscious of the three greatest goods of life, — youth, health, and freedom, — so long as they are in our grasp, but only when we have lost them; for these also are negations. We first observe that the days of our life were happy, when they have given place to unhappy days.

> "Nessun maggior dolore,
> Che ricordarsi del tempo felice
> Nella miseria."

In proportion as enjoyments multiply, we lose our sensibility for them; for what is customary no longer gives pleasure.

Ceaseless longing, unsatisfied desire, is but one form of the misery of life; the quick and easy fulfilment of all our wants introduces only another and worse form of suffering, the aching void of weariness and ennui, which renders life absolutely unbearable, and thus often leads to suicide. So our existence, like a pendulum, swings to and fro between pain and ennui; and this truth is strangely enounced in the fact, that after man had placed all sorrows and pains in hell, all that remained for his heaven was the weariness of nothing to do. Life is always threatened by a thousand various perils, and the utmost watchfulness is needed to escape them. With careful steps, and anxious circumspection, man follows his path, around which countless dangers and enemies lie in wait. So he travelled when he was a savage in the wilderness, and so he must walk even in civilized life, since there is for him no security.

> "Qualibus in tenebris vitæ, quantisque periclis,
> Degitur hocce ævi, quodcunque est."

The life of most men is only a perpetual struggle for existence,

with the certainty of losing it at last. What makes them persevere in the miserable contest is, not so much a love of life, as the fear of Death, which yet stands as unavoidable in the background, and may enter at any moment. Life itself is a sea full of rocks and shoals, which man avoids only by the utmost care and watchfulness, although he knows that, even if successful, with all his exertion and skill, in winding his way through them, he thereby only comes the nearer, with every foot of progress — yes, steers directly towards, the greatest and worst shipwreck of all — Death. This is the final object and termination of his sad voyage. If we reckon up, as far as possible, the sum of want, pain, and misery of every kind, which the sun illuminates in his course, we shall admit that it would have been much better, had it been as little able to evoke the phenomenon of life on the earth, as on the moon, and did the surface of the former, as of the latter, still find itself in a purely crystalline condition. We may conceive our life, indeed, as a short and uselessly interrupting episode in the boundless and blissful repose of Nothingness, as only a gross mystification, not to say, cheat.

The World and Life, as they are here portrayed, thus burdened with crimes, sufferings, and death, are the manifestation of Will, exist only in and through the Will, and express its true character. All the pains and sorrows of this life, as we have seen, are strictly retributive, and therefore just; men are miserable, because they deserve to be so. He who, through his intellect, has arrived at a knowledge of this nature and essence of the world, has but one course remaining to him. It is to renounce the Will altogether, to cease striving after anything, to repudiate all desires, to sink into inaction and mere thought, and thereby, so far as in him lies, to reduce this life to the nothingness whence it was drawn, and which is heaven as compared with the miseries of this world. Hence, in the ethics of Schopenhauer, asceticism, celibacy, quietism, monachism, and the like, are the only virtuous modes of living; for they alone are consistent with resignation for one's self and pity for others. If all would adopt this course, this world would immediately cease to be; for it exists only as Presentation, as a picture before the mind, and this is made continuous only through successive acts of the Will. This, he maintains, is the teaching even of Christianity, a system which, on other grounds, he utterly rejects, as indeed he does all religion, except that of the Buddhists, which, according to him, denies the existence of a God. Throughout the New Testament, this world and the things of the world are

the synonym of evil, and "he that hateth his life in this world" is he that "shall keep it unto life eternal." He forgets the declaration of the Saviour, that "I am come a light into the world, that whosoever believeth on me should not abide in darkness;" "for I came not to judge the world, but to save the world."

And this suggests the only comment, which we really need to make, upon this monstrous system of Pessimism. It is, that these gloomy and misanthropic views of human life are held only by avowed skeptics, like Bayle, Hume, and Voltaire, or by open atheists, like Schopenhauer. Believers, such as Leibnitz, Barrow, Tucker, Paley, and others, either preach Optimism, or so great a preponderance of good over evil, even in this world, as amply to vindicate the goodness of its Creator. Be their opinion well-founded or not, it certainly casts sunshine on their pathway through life, while unbelief shrouds it in sorrow and darkness. The latter is a religion, if it can be so called, of gloom, misanthropy, and despair; and no more striking illustration of this fact can be found than in the philosophy, if it deserves that name, of the atheist Schopenhauer.

The fallacy in the initial argument of the Pessimist is easily pointed out. He holds that life consists in a series of Volitions, each one of which expresses a want, a privation, an unsatisfied desire, and therefore, is a constant sense of suffering and sorrow. On the contrary, Will, because it is the origin and spring of activity, is a perennial source of happiness; for energetic action, the strain of all the faculties, both of mind and body, in the pursuit of some object, is keen enjoyment. While it lasts, it is uninterrupted happiness. Effort is pleasurable in itself, irrespective of the end to which it is directed. Vigorous work quickly becomes play, and therefore, if it is not imposed upon us by any of the necessities of life, we voluntarily create occasions for it, by setting up trivial or imaginary objects to be pursued. We invent or imagine a goal, merely to have the pleasure of running a race. Schopenhauer would have us believe, that a fox-chase is misery, since it springs from a sense of privation and want, because the hunters have not yet caught the fox. The theory of the Pessimist is even ludicrously false; it is the morbid dream of one who has become soured with the world, because he has not cultivated his affections for others, nor his sense of duty to his country or his God, and so has allowed all his desires to terminate in Self. An energetic and persistent Will, constituting what is usually called force of character, because it keeps all the faculties in vigorous action, is a source of happiness

no less than of greatness. "The intellect," says Aristotle, "is perfected not by knowledge, but by activity." The teaching of the Stagirite on this subject is thus tersely summed up by Hamilton: "We exist only as we energize; pleasure is the reflex of unimpeded energy; energy is the means, by which our faculties are developed; and a higher energy the end, which their development proposes. In action is thus contained the existence, happiness, improvement, and perfection of our being; and knowledge is only precious, as it may afford a stimulus to the exercise of our powers."

Pessimism is a natural outgrowth of Pantheism, or rather of the doctrine improperly so called, (since Pessimists, like Schopenhauer and Hartmann, are not theists,) which consists in maintaining that the whole human race must be regarded as *one* individual man, whose existence extends through all ages and over all parts of the earth, so that his single experience comprises all the woes and crimes, which, in fact, are widely distributed, and so, thinly scattered, among countless multitudes of human beings. But this is a baseless theory, which is confuted by the distinct testimony of consciousness, that my own existence, as a separate and individual being, is the highest of all certainties and the foundation of all other truth. Hence, it is an idle task, a fantastic and gloomy dream, to make out a catalogue of *all* the calamities and sufferings of which there is any mention in history, and thereby to imply that any *one* man's life is darkened by the thought of them, or haunted by a dread of their recurrence. As I have elsewhere argued, it is a mere truism to say, that happiness or misery is experienced only by individuals; that there is no such thing as suffering of the race in general; that no one person was ever distressed by a thousandth part of the woes thus enumerated; and that the occurrence even of any one of them would occupy only a small fraction of his whole experience of life, all the rest of which may have been spent in active and even joyous endeavor. Any one man's share of the evils which are possible to humanity is always a small one. The human mind is too happily constituted to be plagued by shadows, by forebodings of infrequent and improbable calamities. It is sanguine; it is much less prone to dream of future ills, than of coming pleasures. It does not, like the Pessimist, brood over the unhappiness of mankind.

> "Verse sweetens toil, however rude the sound;
> All at her work the village maiden sings;
> Nor while she turns the giddy wheel around,
> Revolves the sad vicissitude of things."

We come now to what is most striking and original, and least objectionable, in Schopenhauer's philosophy, — to his theory of æsthetics, explaining the nature of the sublime and beautiful, and the principles of art and taste. The Will, which is the primal force and inmost being of the phenomenal world, does not at once manifest itself in the fleeting forms of individual things. These are perishable, mere waves or ripples on the surface of the deep, which break or fall as soon as formed, constantly becoming, but never enduring, or really subsisting in themselves. The Will is first objectified in the species or genera of things, which persist or endure, being perpetually renewed by the ceaseless activity of the principle of life, though their separate members quickly pass away. Men die, but humanity lives; one generation passeth away, but another generation cometh. What is constantly preserved is the Type of the class, the specific or generic form, that in the likeness of which every individual is created, though imperfectly expressing its ideal perfection. No one plant or animal, not even man, is a perfect representative of its class; all approximate, but none attain, the excellence of their type. This type is the Platonic Idea, the first and highest manifestation of the universal Will, because it does not exist either in Space or Time, and is therefore incapable of plurality, and knows neither beginning nor end. Of *man* in general, the Type of his species, neither multiplicity, beginning to be, nor ceasing to be, can be predicated; he belongs to no one place or time; he is wherever and whenever individual men are possible; indeed, individual men are but his faint and shadowy ectypes, his fleeting and imperfect representatives. Obviously, the Platonic Idea is the nearest approximation to the noumenon, the being *per se*, of Kant; for when he denies that either Time, Space, Causality, or Substance, which are mere phenomenal Forms, can be predicated of the *ding an sich*, he in fact affirms of it just what Plato affirms of his Idea. Without Time or Space, it cannot be plural; without Substance, it cannot be real; without Causality, it cannot have begun to be, or cease to be; it is eternal, increate, immortal. To Schopenhauer, universal Will is the *ding an sich*, and the Platonic Idea or typical form is only its first and highest manifestation; *only* a manifestation, I say, though the first and highest, because, though free from all other phenomenal and subjective Forms of the intellect, it is still subject to this one, the most persistent of all, the distinction between Subject and Object. So long as it is consciously regarded by the mind as an Object of contemplation, distinct from the contemplating Subject, so long it exists only

in relation to that Subject, and therefore is not pure being *per se*. But the man of genius and the true artist is capable, in his happier moments, of rising above even this last Form of time and sense, and of losing his own individuality in ecstatic contemplation of the Idea, as embodied in a genuine work of art, or in the grander and more beautiful aspects of nature. So far as he has true æsthetic perception and taste, he no longer distinguishes himself from the admired Object, but becomes absorbed into it, and identified with its essence. He forgets himself; he ceases to will or desire anything; he is free from the miseries and sufferings of humanity, because no longer conscious of his separate existence. It makes no difference to him, whether it is from the window of a prison or a palace, that he beholds and admires a beautiful sunset. In fact, because he no longer wills to live, his individual life for this moment is at an end; he is self-annihilated; and self-annihilation is Schopenhauer's blessedness, his only idea of heaven. And what the man of genius or the genuine artist habitually does, even common men are capable of doing at times, when stimulated by thoughts, sights, or sounds of unusual grandeur and beauty. They too forget themselves, when music entrances them, or poetry rouses their nobler feelings, or art introduces them into a new world. They become mere eye or ear, — that is, pure intellect without Will, or any disturbing passion; and then they identify themselves with nature, as conscious that one spirit animates both it and them, and are ready to exclaim with the poet, —

> "Are not the mountains, waves, and skies, a part
> Of me and of my soul, as I of them?"

This theory is well founded and striking; but the credit of originating it is due to Kant, who first drew attention to the fact, that absolute disinterestedness, or an entire forgetfulness of self, is necessary before true æsthetic perception and emotion become possible. As soon as we begin to think of the relations of the object either to ourselves, or to other persons and things, as of its ownership, its desirableness, its utility, its fitness for certain ends, or even of its conformity to certain theories and rules of art, immediately our purely æsthetic enjoyment of it vanishes. The mind then becomes occupied with selfish or utilitarian computations, or even with an attempt to justify its admiration by abstract reasoning about the principles of taste; and we thus really become insensible to the beauty and sublimity which we profess to admire. Schopenhauer goes so far as to maintain, that if the object is thought in any of

its relations to things outside of itself, that is, as cause, effect, means, end, seed, blossom, or fruit, so far it ceases at once to afford any pleasure of a proper æsthetic character. Hence, as the sole function of the Understanding or logical faculty is to compare things with each other, and thereby to discern the relations between them, it follows that this faculty is excluded altogether from the province of taste. Science, because it works through the understanding and is occupied solely with relations, with comparison and induction, has nothing to do with æsthetics, but moves in a different atmosphere. The beautiful or the sublime is discerned by a process of immediate intuition, that is, by the mere contemplation of things; no one can reason himself into a perception of them. Yet the faculty for their enjoyment is not a mere perception of the sense, for it is not limited to what is external, but penetrates to the typical Form, the manifestation of the pure Idea, which lies behind.

In the æsthetic mode of viewing things, therefore, we find these two essential elements: 1. The knowledge of the object not as an individual or single thing, but as the Platonic Idea, that is, as the persistent Form, or Type, of this whole species of things. 2. The self-consciousness of the spectator as no longer an individual, no longer a person, but as without Will, a pure knowing or intuiting Subject. The Object is contemplated out of its uses, and out of the forms of Space and Time. It is no longer dependent on either of the roots of the Principle of Sufficient Reason; we no longer ask after its Why or Wherefore, its ownership, whence it comes or whither it tends; we no longer demand the cause or the motive of its existence. It is all-sufficient in itself, and bare contemplation of it is its own exceeding rich reward. Such, to the lover of nature, is the dim forest, the sounding cataract, the ocean beach, or the snow-covered peak of the Alps; such, to the student of art, is the Last Supper of Da Vinci, the Parthenon, the Apollo Belvedere. Even the last phenomenal Form, the distinction between Subject and Object, gradually fades away, and the two are melted into one. The spectator is no longer an anxious and careworn personality, seeking what he has not, craving rest and happiness, and constantly disappointed. He no longer wills or wishes; he is absorbed in the Object, identified with it, and gives up his individual being. He is at one with Nature.

The *conditio sine quâ non* of the union of these two elements is the abandonment of that mode of knowledge which is directed by the Principle of Sufficient Reason, and which is serviceable only

as a slave of the Will, and as a means for science. The pleasure which is excited by the contemplation of the beautiful proceeds from the union of these two elements, though now with more of one, now with more of the other constituent, according as the object of æsthetic admiration requires. All volition springs from some need or want, and therefore, according to Schopenhauer, from suffering. The fulfilment of the desire puts an end to this; but for one wish that is gratified, at least ten remain to plague us, as unsatisfied cravings. Moreover, desire continues long, and its demands reach to the infinite; while fulfilment is short, and is grudgingly imparted. Even the finite gratification is but a vain show; the satisfied wish immediately gives place to a new one; the former is an acknowledged error, the latter continues to deceive. No obtained object of desire can give permanent, never-fading joy, but is only like the alms thrown to a beggar; it brightens his life to-day, merely in order to darken it on the morrow, which brings no further boon, and is saddened by the contrast. Therefore, so long as our consciousness is occupied by the Will, so long as we are constantly urged by desire, with its constant hoping and fearing, so long we are slaves to the Will, and there is for us no abiding happiness or rest. Whether we hunt or fly, fear evil or strive after good, it is essentially all the same; care for the always craving Will, in whatever form it shows itself, persistently occupies and agitates our consciousness; and without rest, no true well-being is possible. Thus the Subject that wills is stretched forever upon Ixion's wheel; he is ever pouring into the sieve of the Danaides, is forever mocked like Tantalus.

But when some external occasion or internal impulse suddenly lifts us up out of the never-ending flow of the Will, and tears away the cognitive faculty from its enslavement to desire, then the attention is no longer directed to the motives for volition, but the mind comprehends things out of their relation to the Will, and therefore considers them disinterestedly, without subjectivity, views them in their purely objective aspect, and is wholly given up to them, so far as they are mere Presentations, and not motives; then, that peace of mind, first sought for, but always sought in vain, through the Will, or as an object of desire, now comes upon us at once, of its own accord, and all is completely well with us. This is the painless condition, which Epicurus praised as the highest good, and believed to be the state of the gods. Then we are, for that moment only, released from the ignoble pressure of the Will; we keep the Sabbath from the penitentiary labor of the Will, and the wheel of Ixion stands still.

Science, because it is constantly seeking for the Reason of things, always asking Why, is occupied only with phenomena. On the other hand, Art, the offspring of Genius, beholds only the eternal Ideas, the essential and the permanent, lying above and behind the phenomena, which are only shadows. Art aims to impart these Ideas to others by expressing them in sensible forms, and according to the material on which it works, it is either plastic Art, Poetry, or Music. Some objects are so constituted, through their union of variety and multiplicity with order and distinctness, through the absence of harsh transitions, and the harmonious blending together of numerous parts into one uniform whole, that the Ideas which they symbolize are seen as if reflected in a pure and bright mirror; they appear prominent and vivid, and need no effort to comprehend them. Such objects are said to possess Beauty, because the mind of the beholder easily passes into the state of æsthetic contemplation of them, and is thereby filled with unselfish and spontaneous delight. It is pleased without a reason, it knows not wherefore. While the Beautiful thus prompts, invites, and facilitates æsthetic emotion and insight, the Sublime forcibly arrests attention, reduces the passions and the Will to silence, and compels the observer to stand still and admire. Hence a feeling of awe or terror often heightens the impression of Sublimity, increasing the energy and violence with which it masters all other perceptions and appetites, and assumes exclusive dominion over the soul. But if the emotion of terror is so much excited that the beholder becomes alarmed for his personal safety, his individual Will is brought again into activity, and the feeling of Sublimity disappears, because it is merged in a selfish desire for self-preservation. Thus, as Lucretius reminds us, when we are in safety on the shore, it is pleasant to observe a storm impending over the ocean and bringing the hapless mariner into peril. But the approaching conflict with the winds and waves raises no emotion of Sublimity, and therefore imparts no pleasure, if we are in a frail bark, and thus exposed to all the violence of the storm.

Beauty softens and tranquillizes the mind, grandeur conquers and overwhelms it. But in either case, the intellect no longer searches or inquires; it loses sight of the relations of things to each other and to itself, and is absorbed in wonder and admiration. A person of lofty character produces the impression of Moral Sublimity, because we are forced to admire his entire forgetfulness of self and disregard of the ordinary selfish motives which prompt common men to action. He never thinks of what will injure or pro-

mote his own passions or interests, but contemplates men and things from an entirely objective point of view, with as little regard to what may affect himself as if he were beholding the inhabitants of a distant planet. It follows from this analysis, that what is simply alluring or attractive in the sense of exciting passion or desire, is the very opposite of the Beautiful. What often passes, though with persons of degraded taste, under the name of Art, is merely the luscious or licentious, which, because it feeds appetite or stimulates passion, is never typical or representative of an Idea, and so contributes to develop, instead of restraining, the disturbing consciousness. So, also, mere imitation, as in the lower forms of portrait-painting, because it is related solely to an individual form, without reference to any general idea or character impressed upon it, is petty, and however skilfully done, cannot awaken genuine æsthetic admiration.

The Ethics of Schopenhauer are based upon a frank avowal of all the logical consequences of his doctrines of Fatalism, Pessimism, and Monism. An action, he says, can no more take place without a sufficient motive, than a stone can move without a sufficient thrust or pull; and when a motive is present which is strong enough to act upon the agent's character, the action cannot fail to take place, if it is not prevented by a more powerful antagonistic motive. Hence, it is idle to talk about a Categorical Imperative, about what we *ought* to have done, since this implies a falsehood, namely, an assertion that we *could* have acted otherwise. "In this theory of Ethics," says Schopenhauer, "let no one expect to find any moral precepts, or any doctrine of duties; still less should he look for any universal precept for creating all virtuous actions. We shall speak neither of any unconditional obligation, nor of any law imposed on human freedom; since both of these phrases are self-contradictory. We shall say nothing of what *ought* to be; for so one talks to children, and to nations in their childhood, but not to a people who have appropriated to themselves all the culture of a civilized age. Indeed, there is an obvious contradiction in calling the Will free, and still prescribing laws to it, how it *ought* to will. 'Ought to will!' — that is, wooden iron."

And yet an action may properly be deemed either praiseworthy or blameable, according as it does, or does not, promote some valuable end, or conduce to some beneficent result; and also, according as it is based upon a true or false theory respecting the nature of things, the constitution of the universe, and the relations of man

to his fellow beings and to the other orders of animals. And what is the true theory in these respects, according to Schopenhauer? It is, as we have seen, that All are One; that all distinction of individuals is only phenomenal or apparent, being only presentations to my thought; that as Space and Time are unreal and have only subjective validity, so also all plurality or multiplicity, depending upon Space and Time as their *principia individuationis*, are equally unreal, are mere shadows of the only actual entity, which lies behind them, the one universal Will, with which my own Will is in truth coincident, being only one of its countless manifestations.

As an immediate consequence of this doctrine of Monism, we have a theory of Right or Justice. He who recognizes all other men as coördinate manifestations of the same Will with himself, and who in fact regards them as identical with himself, will treat their interests as if they were his own, and will consider that in benefiting or injuring them, he thereby benefits or injures himself. In short, he will follow the golden rule: he will do to others whatsoever he wishes that they would do to him. He will be in harmony with the world; he will perceive that there is no dividing wall between others and himself. On the other hand, the bad man, blinded by the veil of Maja, and falsely regarding phenomenal distinctions as real ones, will consider other persons to be forms of his Non-Ego, and therefore mere phantoms, while his own personality is the only real one in the universe. This is the essence of Egoism or selfishness. The true Egoist believes himself to be the sole reality, and therefore unhesitatingly appropriates all goods to his own use, without any consideration for others, who are as nothing in his esteem. He is not necessarily malicious, or positively bad, since he does not harm others gratuitously, but only when he may thereby procure some advantage for himself.

The essence of Injustice, or Wrong, consists in carrying out in conduct the unfounded assumption that one's own will can rightly make the wills of all other individuals subservient to it, since they are merely spectral presentations to his fancy. My own will affirms and realizes itself in my own body, and all the powers inherent in that body may be fairly used by me for my own purposes. But the Egoism which belongs to human nature constantly tempts me to go so far in affirming my own will as practically to deny or transgress my neighbor's will as expressed in his body, and thus to compel his powers also to serve my selfish ends. This infringe-

ment of the limits of another's will, appearing in an attack made either by violence or fraud upon his person or his property, is what the world properly stigmatizes as Injustice; and the harm thereby done to the sufferer is enhanced by the peculiar mental pain which arises from a sense of Wrong endured. Justice, says Schopenhauer, is only negative, since it consists merely in refraining from Injustice. The latter is the positive term, because it consists in active infringement, which is negation, of another's right; while Justice simply abstains from so doing, or at most, acts only in order to ward off Injustice, and thereby denies or negatives a negation. The vehemence of the individual's will is that which constantly tempts him to wrong-doing, since it blinds him to a perception of the truth, that by injuring another he is in fact injuring himself, because the assailant and the victim are really one. This truth, as we have already seen, is the basis of eternal Justice, which is necessarily retributive; and it is a vague foreboding, a sort of dim consciousness of it, which creates what is usually called remorse of conscience.

Still further; the wise man, recognizing the essential unity of all living beings and inanimate things, and therefore making no distinction between others and himself, will be not only just, but pitiful. As by harming any living thing he would really harm himself, so his compassion for every sufferer, his pitying regard for any unfortunate man or animal, is only an expression of grief for the countless woes to which he is subject in his own person. All the miseries of human life are his own, and therefore by doing his best to alleviate them, he is really benefiting himself. We weep, says Schopenhauer, not on account of the pains which we are actually enduring at the moment, but because we are thinking over, we are repeating in imagination, the woes which we have endured, or to which we are looking forward. It is because our own woes, when pictured in fancy, seem more intolerable than when we first experienced them, that we are oftener moved to tears by others' sufferings than by our own. And yet it is only so far as imagination makes them our own, that we grieve for them. We weep for ourselves only when we find our own state so pitiable, that if we saw another person suffering the same ills, we are convinced that we should be full of compassion and of an active desire to aid him. Thus Petrarch admirably describes the reason why he wept: —

"I vo pensando; e nel pensar m'assale | |
Una pietà si forte di me stesso,
Che mi conduce spesso
Ad alto lagrimar, ch'i non solevn."

The greatest excellence, however, of which human virtue is capable, is reached when pity for the countless miseries and wrongs of which this world is the theatre goes so far that one renounces altogether the exercise of Will, sinks back into pure inaction, and tranquilly beholds all existence fading out into nothingness. Life and the world, woful and pitiable as they are, are only the manifestation of the Will to live, only the mirror in which the Will beholds itself in its true character; and since all plurality and difference are merely phenomenal and unreal, that Will is my own, is myself. Throttle the monster, then; chastise every passion; renounce every desire; cease to will; and thereby cause the lights to be extinguished, and the curtain to fall.

CHAPTER XXIII.

Hartmann's Philosophy of the Unconscious.

Edward Von Hartmann, the founder of the latest, and at present the most popular, Philosophy of the Absolute, is one of our contemporaries, as he was born in Berlin, February 23, 1842. His father was an officer of artillery in the army, but stationed permanently at Berlin, as the head of a commission for testing by experiment all pretended improvements in heavy firearms. Thus spared the necessity to which other army officers are subject, of being frequently shifted from one military station to another, his son's education was carried on without any intermission or change of locality in the excellent public schools of the German capital, and Edward therefore boasts of being a genuine "Berliner." He was an only child, and as he thus had no young playmates within the family, and was quick-witted and precocious in mental development, he became rather prematurely old in his manners, habits of thought, and modes of expression, because his only associates at home were his parents or other persons of greater age than himself. Even at school, as his precocity caused him to be jumped over the younger classes, he had but few boyish associates, and those considerably older than he was. He completed with distinction, and at an unusually early age, the whole course preparatory to entering the University. But he had no liking for the ordinary academic studies, except mathematics, his favorite pursuits being music and drawing. Hence, and because he disliked excessively the coarse and almost brutal manners and amusements of the students, he decided not to enter the University, but to adopt his father's profession. It is a curious fact, that neither of the two systems of German philosophy, which have become widely known and have found numerous disciples in our own day, is of University origin; Schopenhauer was not a professor, Hartmann was not even a graduate. Before receiving a commission in the army, it was necessary to pass through one of the military schools, and Hartmann selected the school of artillery and engineering. Here,

however, his studies were soon interrupted by chronic rheumatism in his lower limbs; and this malady was soon complicated by the crippling and tedious affection of water on the knee. The disease first appeared when he was only nineteen years old, and after prolonged but fruitless trial of all that the physicians and various mineral springs could do for him, he was compelled, at the age of twenty-three, to abandon his profession, in which he had already obtained the rank of first lieutenant, and resign himself to the gloomy prospect of being a cripple within doors for a long period, perhaps for life. In 1867, however, the malady reached its worst, and since that time, it is pleasant to learn that there are signs of steady though very gradual improvement. In a short autobiographical sketch, published in 1876, he writes cheerfully about himself, constant literary occupation, an accomplished and affectionate wife, and a son two years old contributing much to the happiness of his home. Alluding to one of Hartmann's fixed opinions in philosophy, an intimate friend of the family once laughingly remarked, "If you wish to see bright and contented faces, you must go among the Pessimists."

Among the occupations open even to an invalid confined to the house were those of music, painting, and poetry, for each of which he frankly confesses that he had much liking, though but little genius, and in each he made earnest trial of his productive power, though not to much purpose. He even published a poetical drama on the story of Tristan and Isolde, which did not meet a flattering reception. Then, renouncing effort where only failure was probable, to use his own phrase, he bravely threw the fine arts overboard, and in spite of earnest dissuasion by his father, he settled down to the strenuous amusement, which he had long had a hankering for, and somewhat practised, namely, a thorough course of metaphysical study and speculation. Without any instruction or sympathizing friends with whom to converse upon the subject, he eagerly read the published works of Hegel, Schelling, Schopenhauer, Kuno Fischer, and many other renowned German thinkers. Near the end of the year 1864, at the age of twenty-two, he began to write "The Philosophy of the Unconscious;" and in April, 1867, this able work, a large octavo volume of over 800 closely printed pages, full of original speculation and subtle reasoning, and evincing a large acquaintance with the physical sciences in their principles and their latest theories and results, was completed and ready for the press. But the finished manuscript remained a full year lying in his desk, and it was only the accident of mak-

ing the acquaintance, in 1868, of a competent and willing publisher, which prevented its author from complying with the advice of Horace, *nonum prematur in annum.* When published, the work had immediate and great success. Though its author was almost a boy in years, with no aid from previously earned reputation or high social position, without help from University cliques or from association with the managers of literary and scientific journals, who nowadays generally forestall public opinion, the book in eight years passed through seven successive editions, and raised a hail-storm of review articles and pamphlets. This remarkable success was fully deserved. Hartmann's style, though not so brilliant as that of Schopenhauer, is clear, concise, and forcible, his learning ample, and his speculations often appear novel and ingenious, though the reader may dissent from the conclusions at which he ultimately arrives. He is a good psychologist and a shrewd observer of human nature; and he shows more practical judgment and a larger fund of common sense than are usually found in the writings of German metaphysicians.

The Philosophy of the Unconscious is a great improvement upon the doctrine of Schopenhauer, though it is built in the main on the same foundations, and often seems to arrive at similar results. But the qualifications of his predecessor's opinions are numerous and important, and are generally such as to take away much of their offensive character, and to prepare them, perhaps after some farther modification, for general acceptance. Thus, he is nominally a Pessimist; but he also fully accepts and defends the doctrine of Leibnitz, that this is the best of all possible worlds, making this qualification, however, that though it is the best possible, it is still so bad that it would be better for all of us if it did not exist at all. But Leibnitz also teaches the inevitable character of what he calls "metaphysical evil," which even omnipotence could no more obviate than it could create two mountains without a valley between them. At the worst, then, Hartmann only exaggerates the amount of this "metaphysical evil;" and therefore, I cannot see why he has not as good a right to be called an Optimist as either Leibnitz or Pope. In fact, his Pessimism appears rather speculative and theoretical in character, than earnest and profound. It is only his rhetorical presentation of the old difficulty, which all theologians feel the weight of, respecting the origin of evil. He is *not* a misanthrope, he has not a suspicious and gloomy temperament, and his experience of life has not been so unhappy as was that of Schopenhauer. Hence, if he should be

entirely cured of the malady which has so long crippled him, and if his happy family should increase in number and contentment, his admirers may well hope to learn that he has abjured Pessimism as bravely as he has already renounced his inclination to dabble in poetry and the fine arts.

Nominally, also, Hartmann holds atheistic opinions; and yet his philosophy so nearly coincides with the theism of Christianity, that in the sixth edition of his work, he found it expedient to insert an additional chapter, and a long and elaborate one, on "the Unconscious and the God of Theism," in which he concedes and explains away so much, that his doctrine remains hardly distinguishable from the theology which is now often inculcated without offence in a Christian pulpit. This acceptance of most of the conclusions of natural theology will appear sufficiently manifest in all that follows. It is noticed here only in order to call attention to the weight of the testimony which is thus involuntarily rendered to the truth. Beginning, as he frankly avows, with a strong prejudice against theism, attempting to build up a philosophy of human nature and of the phenomena of the universe which should nowhere require the existence of a God, the course of his investigations and his reasonings still brings him irresistibly near to the very conclusions which he sought to avoid. A little more earnestness of feeling, and some greater definiteness and warmth of moral purpose, would probably have opened his intellect to a full conviction of the truth. For the only disagreeable personal trait which one finds in his writings is the entire lack of enthusiasm, and a certain hard and dry manner which is so cold-blooded as to appear repulsive.

The purpose of "The Philosophy of the Unconscious," as taught by Hartmann, is to prove that there is omnipresent in nature One Will and Intellect, acting unconsciously in inseparable union with each other, through whose agency all the phenomena of the universe may be satisfactorily accounted for. He will not consent to worship this principle as Deity, though he declares that his name for it, "the Unconscious," is not merely a negative expression, signifying the absence of consciousness, but that it has the very essential positive attributes of Will and Intellect, which necessarily act together, and are never divided from each other except in the mind of man, where *first* the phenomenon of Consciousness begins to appear, and where, consequently, Intellect may be emancipated from control by the Will, though even here Will must always be accompanied by intelligence. Even this partial divorce of the two psychical principles never takes place in "the Un-

conscious;" "but all unconscious functions are exercised by *One identical* Subject, which has merely its phenomenal manifestation in a multitude of individuals; so that 'the Unconscious' signifies this One absolute Subject."

Hartmann is a thorough-going Monist, therefore, after the manner of the Eleatics, maintaining the doctrine of (*All-Einheit*) the essential Oneness of all things, so that his principle of "the Unconscious" takes the place of Spinoza's universal "Substance," of Fichte's "absolute Ego," of Schelling's "absolute Subject-object," of Hegel's "absolute Idea," and of Schopenhauer's "Will." But he differs from all these philosophers in his *method*, which is not the usual one with metaphysicians, of deductive reasoning from abstract principles, nor yet of the spontaneous evolution of thought by a dialectic process. He adopts the method of the physical sciences, resting nearly his whole theory upon induction from observed facts. He builds in the main upon the common facts that are universally known, and upon the latest results obtained in the sciences of physics, biology, physiology, psychology, and history. Hence his work is by no means so abstruse and forbidding in character as are most metaphysical treatises. It is a vast repertory of curious and interesting facts, collected from all the fields of science, stated with remarkable brevity and precision, and dovetailed into the unity of theory and system by much ingenious argument and speculation. In its way, the book is almost as attractive as the celebrated "Origin of Species," and owes its early popularity, probably, to the same causes which contributed so largely to Mr. Darwin's great success. It is spiced with heretical doctrine, it betrays the imagination and the insight of a poet quite as much as the profundity of a philosopher, and it brings together on one canvas the latest speculations of science and a multitude of details, each one of which would interest even a school-boy. It is only after he has laid the broad foundations of his theory on inductive principles, and in the later portions of his work, that Hartmann rises into the pure but thin atmosphere, incapable of respiration by ordinary lungs, where metaphysics find their proper home, and where he certainly shows a power of fine analysis and subtle and abstruse reasoning, and a thorough knowledge of the history and the results of philosophy, which would do honor even to Hegel.

As the first step towards proving the presence throughout nature of one Will and Intellect (*Wille und Vorstellung*), distinct from what appears in the mind of man, he is obliged to analyze the idea

of Purpose or Final Cause (*Zweck*), and to show that physiological and psychological processes, and indeed the phenomena of the universe generally, cannot be satisfactorily explained and accounted for except on the hypothesis that they were at first arranged, and are ever afterwards directed and kept in activity, by one governing Purpose; in other words, that they everywhere indicate intelligent Design. He argues rightly, that the conception of Final Cause by no means excludes that of Efficient Cause, but rather presupposes it, and could not be carried out except through its coöperation. If I am not able to bring about directly the End which I have in view, he says, I seek for some Means of accomplishing it indirectly; then, being myself an Efficient Cause, I *will* those Means, and thereby produce them; and these Means thus realized, through *their* Efficient Causality, produce the End which I at first designed. The physicist is right, therefore, in maintaining that all events are produced by Efficient Causes; but then these Efficient Causes may be selected, arranged, and directed *by mind*, by an intelligent Will, which seeks through them to carry out its own Purposes. Surely, an intelligent Will is one Efficient Cause among others; volition counts for something in this world's affairs. Even Mr. Darwin or Professor Huxley will admit as much as this; since otherwise, he could not grasp a pen and write the words through which he would express his denial of it. We do not deny the Efficient Causation of the pen, the ink, and the fingers in writing those words; and he cannot deny the Final Cause, the Purpose, which chose, combined, and governed those Efficient agencies. Thus, in maintaining that the structure of the human eye proves Design, Hartmann does not deny, but affirms, that many physical agencies — "physical laws," if you choose to call them so — must have coöperated in building up that complex and nicely arranged organ; he only asserts that these would not have so coöperated harmoniously, if they had not been combined and directed by some intelligent Will for that very purpose.

If a highly useful end — that of distinct vision, or hearing, for example — is brought about by a complex and intricate structure, like that of the human eye or ear, which we know to have been produced through the combined action of *many* distinct physiological laws operating on the only fit material, protoplasm, which is always made to be conveniently near at hand, then, Hartmann argues mathematically, from the Doctrine of Chances, that the probability is overwhelming in favor of the hypothesis that the *many* necessary arrangements were intentional, were effected by a

designing Will, through which these laws were made to coöperate harmoniously so as to bring about the useful result. I have already given an outline (see page 277) of this curious argument, which depends wholly on the mathematical principle, that when the concurrence of many distinct conditions is needed before a certain result becomes possible, the probability of such concurrence is ascertained by *multiplying* into each other successively the fractions denoting the probability of each of the conditions taken singly. Hence, as at least thirteen separate arrangements are required before the human eye can successfully do its work, the probability of a combination of all of them being effected in any other way than through the direction and agency of an intelligent, designing Cause, is expressed by so minute a fraction that it cannot be entertained for a moment by any sound mind. It is the probability, with thirteen dice in the box, of obtaining sixes from all of them at a single throw, through any number of trials. We are morally certain that it could not be done.

But this is not all. As Hartmann insists, the argument is still further cumulative. The eye is by no means the only organ in the human body depending on the combination of many nice arrangements. It is but one out of hundreds of similar instances, such as the ear, the hand, the respiratory apparatus, the heart, etc., the union of all of them being necessary for the continuous life and activity of the organism as a whole. Hence, the extremely minute fraction representing the probability of *the eye alone* being produced solely by a fortuitous combination of merely physical causes, must be raised at least to the one hundredth power, and thereby become almost too minute to admit of numerical expression, before we obtain the probability of the Darwinian hypothesis being the true one, namely, that the whole human body might be so constructed, without supposing the process to be anywhere foreseen, directed, and brought about by a designing Intellect and Will.

Hartmann's work is divided into three Books, the first of which brings together the evidence of unconscious mental action in the corporeal organism; the second contains proofs of the activity of the Unconscious in the phenomena of the human mind; while the third presents what the author calls the Metaphysics of the Unconscious. He first directs attention to the independent or self-regulating functions of the ganglia, or lower nervous centres, connected with the spinal cord and the sympathetic system. These, without any communication with the brain, and therefore unconsciously,

direct and maintain complicated movements nicely adjusted to each other, such as the beating of the heart and the movements of the intestines and other organs, all of which are necessary means of keeping up the vitality of the system and enabling the body to perform its work. In a decapitated frog, Professor Huxley tells us, if the limbs are stimulated by touching them with a drop of acid, rapid and active movements will take place, "even the feeblest and simplest of which require a certain combination of muscles, and some of them, such as the act of rubbing off the acids, are in the highest degree complex. In all of them, too, *a certain purpose or end is evident;*" and "in the more complex movements, *such a purpose is strikingly apparent.*" The spinal cord is only in part a transmitter of impulses to and from the brain; but in part, also, "it is an independent nervous centre, capable of originating combined movements" upon the reception of a nervous impulse. The conscious mind knows nothing of these movements; they are produced and regulated, so to speak, by a power outside of ourselves, and so regulated as to suit the varying exigencies of the moment, and to serve important purposes in the animal economy.

Thus far we have considered only a class of facts, with the obvious deductions from them, which have been for some time familiarly known to physiologists. But Hartmann proceeds to argue in a very original and striking manner, that even the *voluntary* movements of the muscles and limbs cannot be effected without the coöperation of the Unconscious. I simply *will* the movements of my fingers by which these words are written, without knowing anything of the intricate machinery of nerves, muscles, and tendons by which the volition is executed, or even of the particular point in the brain which must be touched, in order to bring the complicated apparatus into play in such manner that precisely this movement, and not an entirely irrelevant one, may be brought about. The brain may be compared, he says, to the key-board of a pianoforte, though so curiously fashioned as to present within narrow limits almost a countless multitude of keys; and the right note can be sounded, or the intended motion be effected, only on condition of instantly hitting the right one out of the whole number. Speaking of the human body in his earnest and yet simple manner, good Dr. Watts exclaims: —

> "Strange that a harp of thousand strings should keep in tune so long!"

Stranger still is it, that an unseen musician should be always at

hand to make the instrument discourse eloquent music in the most intricate harmony and melody, whatever combination of these its owner may call for. Consider what various, rapid, and skilfully combined movements of his arms and fingers the human organist must call for, in order to express his musical ideas; and how the curiously complicated structure of his brain, his nervous and muscular system, which he knows nothing about, is so directed by his unseen assistant as to correspond precisely to his volitions. He merely *wills* the work, and it is done *for* him, though not *by* him.

Further proof of the action of "the Unconscious" is afforded by the phenomena of Instinct, which is defined by Hartmann to be "acting in conformity to a purpose, without any consciousness of that purpose." There are only three possible modes of accounting for such actions: 1. That it is a mechanical consequence of the animal's corporeal organization; 2. That the brute's mind is so constituted by nature as to be a sort of spiritual automaton; 3. The doctrine here maintained, that it results from the constant intervention of the Unconscious. The first of these hypotheses accords with the Cartesian dogma, that animals are only curiously fashioned machines; and it is here controverted, on the ground that the instincts are often dissimilar, when the bodily structure is the same. Thus, all spiders have the same spinning apparatus, though one species always constructs regular polygonal and radiated webs; another weaves them in any irregular form; while a third does not build any web, but lines with its silk the sides and door of the hole in which it lives. All birds have essentially the same means, claws and bill, for constructing a nest; but the forms adopted by them, the places chosen, and the modes of attaching the structure to its supports, present a measureless variety. They have the same organs of voice, but the songs of no two species are alike. On the other hand, the instincts often are the same, though the organizations are dissimilar. The migrating impulse shows itself with equal strength in animals very differently constituted, and provided with various means for performing the journey, whether by land, or water, or through the air. Numerous species are arboreal in their habits, though very few of them have similar means or reasons for making their homes in trees.

Moreover, the attempt to explain instinct as the blind and necessary operation of machinery, either in the animal's corporeal or its mental organization, only pushes the designing action of the Unconscious one step farther back. It is the same Power which

does the work, and with the same purpose in view, whether it operates directly and at the moment, like a special Providence, or provides for it long beforehand by a far-seeing contrivance, which impels the animal mechanically to do just the right thing at just the right time. Instinctive action is not incessant, often is not uniformly periodic; but it comes into play only when exigencies arise, which would afford sufficient motives, if the conscious human intellect were concerned, to call out all its inventive skill, all its defensive and provident energies. And the wisdom of the Unconscious, thus manifested in instinct, far surpasses the wisdom of man. It never hesitates or wavers; it takes no time for deliberation; it effects instantly the necessary combination of numerous and far-reaching means; and it makes no mistakes. Hartmann rightly attributes to it that mysterious power, which we have no one English name for — in German, *Hellsehen*, in French, *clairvoyance* — which is properly divine, for it is unquestionably superhuman. Thus, carry away blindfold some animals, like the carrier pigeon, the honey bee, and even some quadrupeds, to a distance of many leagues, by a route which they have never before traversed, and instantly, on being set free, they return "in a bee-line" to their old homes. A species of wasp stores up food of a kind which it never uses for itself, and carefully deposits it in a fit receptacle which is not its own abode, for the use of its young whose birth it will not live to witness. It is in view of prodigies like these, that even cold and skeptical Kant exclaims, "Instinct is the voice of God." Hartmann's interpretation of them, that they are the action of the Unconscious, sounds like bathos, but has precisely the same meaning as Kant's. These facts obviously negative the fanciful hypothesis, that human reason is developed out of animal instinct through a blind process, which necessarily perpetuates all accidental variations from the typical form if they are improvements on it, while it just as necessarily kills out all changes for the worse. Man has lost a wonderful faculty which is still possessed in great perfection by birds and insects. We ought also to consider that nothing is gained by referring the instinct to the structure of the organism, whether mental or corporeal; for it is already obvious, and will be more fully proved hereafter, that the organic structure itself is built up, step by step, by the purposeful action of the Unconscious. Hence, instead of making the instinct to depend on the organization of the brain, we ought rather to regard the whole nervous system as fashioned by the instinct which was innate in the germ.

Bodily movements having a useful purpose, though their motive or exciting cause is not a thought originating in the brain, but merely an impression on the sense or some irritation of the skin, are usually attributed to the reflex action of the nerves, and are considered as entirely mechanical. But as the effect of a single stimulus, though not reaching the brain, and so unconscious, may be to induce a series of nicely coördinated motions, the whole result of which is important for the welfare of the organism, the action ought to be classed with the phenomena of instinct rather than with the operation of machinery. The involuntary movements thus induced are often surer, quicker, and even more graceful, than the voluntary ones; and through the perfecting power of habit, even the action, which was deliberate in its origin, may drop out of consciousness, and thus come to appear mechanical. In such cases, we often *will* the combined result, but know nothing of the successive steps of the process by which it is effected. Hartmann supposes, that the brain consciously sets the lower nervous centres at work, and these unconsciously guide the muscles so as to perform the intended act.

If the nest of the bird or the web of the spider is damaged, the animal quickly repairs the rent, and makes the structure as serviceable as before. In like manner, if some of the bird's wing-feathers are pulled out, or the spider has one of its legs accidentally torn off, "the Unconscious" quickly makes good the loss, and the sufferer recovers its whole locomotive power. Shall we say that the operation in the two former cases is purposeful, but in the two latter that it is purposeless? If the artisan tears his coat, he can mend it; if he cuts his finger, "nature" will mend it for him in forty-eight hours. Yet, according to Decandolle, Mr. Charles Darwin, and Professor Huxley, we have no right to say that "nature" *intended* to do any such thing. Very marvellous is the *vis medicatrix reparatrixque Naturæ*. After poisoning their patients with drugs through many centuries, the doctors have at last come to know their business better, and now generally stand aside, or attempt only to remove obstacles which ignorance or accident may have put in the way, so as to leave free course to the curative agencies of the Unconscious, which alone can restore the patient to perfect health.

The reconstructive power (*vis reparatrix*) of the Unconscious, as in replacing an entire limb or segment of the body after its amputation, is far more frequently and perfectly shown in the lower species of animals than in those of a higher grade, and least

of all at the summit of the scale, in man, where usually nature only reunites and heals (*vis medicatrix*), but does not restore. The animal has here a great advantage over man, and thus again, as in the case of instinct, Darwinism fails to explain the facts, since evolution from the lower to the highest form is not improvement, development is not progress, except it be progress down hill, and therefore the theory of "natural selection" out of "a struggle for life" is not applicable. Hartmann ingeniously accounts for nature's reconstructive power being less active in the higher forms of animal life, by saying that the Unconscious here turns all its energies inward, so to speak, in order to improve the intellect through developing the brain, and consequently has less effort to spare in reproducing crushed or amputated joints and limbs. If one of the Annelidæ is cut in two by a cross section, nature builds up each of the severed parts into a perfect animal again, reconstructing a head with its proper appendages for the lower half, and a tail with its adjuncts for the upper one. It would seem, says Hartmann, as if there must be present *in each of the severed parts* an Idea of what was wanting in order to build up again the whole typical form of the species; and this Idea is the pattern or model according to which the Unconscious works. From each of the cut ends a minute drop of protoplasm exudes, and this is quickly and deftly moulded in each case into such prolongations of the alimentary canal, the blood-vessels, and nerves as are needed respectively for the upper and the lower half of the animal as a whole, several organs in one of the reconstructed moieties having nothing analogous to them in the other. Merely physical causation, blind mechanism, cannot explain such a process; Will and Intellect must coöperate in the work.

The plastic power of nature (*nisus formativus*) consists in so building up every organism that, at each stage of its existence, it shall perfectly realize or represent the typical form, the Idea, of its peculiar species; while its curative and restorative power aims only at the preservation of this form against accidents after it has once been constructed. In a large sense, both these powers may be regarded as instincts innate in the germ, and working continuously, but unconsciously, towards keeping up the countless definite forms of life, each in its own kind. Indeed, Instinct may be considered as the most general expression, the typical form, of the action of the Unconscious. In each case, a peculiar useful or necessary result is the goal of the process, requiring foresight and choice by unconscious Intellect, and the application of unconscious

force or Will supplying the means for its attainment. The ultimate purpose, the final end and aim of the animal kingdom as such, Hartmann insists, is the development of consciousness. In the vegetable realm, on the contrary, all the energies of the Unconscious are devoted to the mere conversion of inorganic matter into organic, and of the lower organic structures, or stages of combination, into higher ones; and therefore it has, so to speak, no spare force left for efforts at internalization, and for building up forms of subjectivity. But animals have their food provided for them ready made by the processes of vegetation; and hence, the Unconscious in them can apply itself chiefly to constructing a nervous system and a brain as organs of a conscious mind. What vegetative life produces, animal life consumes; and from the lowest animal form up to man, we witness a constantly rising and heightened development of nervous structure and consciousness. Thus, freedom of locomotion is needed in order to gain the wider and more diversified experience which is a necessary means of mental development, and so of rising to a higher stage of conscious life. Hence, the lowest animals, as in the case of some aquatic species, because fettered for life to one spot, are hardly distinguishable from plants.

It is not necessary to pursue farther the train of argument and illustrations by which Hartmann attempts to prove inductively the omnipresence of an unconscious Will and Intellect in nature's corporeal forms. But the few specimens here given of his mode of conducting the inquiry may suffice, I think, to indicate the abundance of rich material which he has at hand for the purposes of his theory, and the clearness and ingenuity with which he reasons upon the facts adduced as the groundwork of his conclusions. But before passing to his second book, which considers the action of the Unconscious in the human mind, I must briefly notice his argument against the doctrine of Schopenhauer, who holds that the essence or inmost being of nature is a merely blind Will, not accompanied or directed in any of its lower stages by any form of Intellect. Hartmann maintains on the contrary, that Will as such, in order to express itself in determinate volitions, must be inseparably united with cognition; that it could not act at all except in coöperation with mind. The very nature of volition is a felt dissatisfaction with an existing state of things, and an attempt to bring about a different state of them; that is, to produce a change. It necessarily implies one condition which is present and which alone is real, as the starting point, and another condition, which,

because it is willed, must exist in the future, and therefore can be *now* present only in idea. In other words, we cannot will without *knowing* what we will. Then there must be an end or aim for every volition; and this end can be present only in thought, for if it were also present in reality, we should already possess all that we desire, and there would be no occasion to will. Hence, without thought, without an idea of what is still future, in other words, without a purpose or Final Cause, Will would not be Will, as it could not be definitely expressed in any determinate volition, or aim at any one thing more than another. A volition without any definite aim or content is inconceivable; for there is no such thing as Will in general, that wills nothing in particular. The mere striving or effort is only the Form which is common to all volitions; any one of them, in order to be realized, must have the merely blank Form filled out with a content, that is, with a determinate purpose, which is necessarily mental or ideal, to accomplish some particular end. Consequently, Schopenhauer's whole theory respecting the secondary and derivative nature of Intellect, created at a comparatively late period in the history of the Will, and so created only in order to be the minister and servant of the autocratic Will, falls to the ground as a baseless assumption. Mind is restored to its rights by Hartmann, as coeval with Will, and inseparably united with it in the Unconscious, though capable of being divorced from it, and thus of existing independently, in its human manifestation. But Will, as already remarked, cannot, under any circumstances, be separated from Intellect, being forever dependent upon it for guidance and determination. Of course, the guiding idea, the dominant motive, may be unconscious. Often we are not aware what we will, or even *that* we will. But the determinate nature of the volition, the fact that we will *this* rather than *that*, proves that the guiding idea is always there, though it may not rise into consciousness.

Hartmann begins his proof of the action of the Unconscious in the realm of mind by attempting to show that man, as well as the brute, has instincts properly so called. This seems to me questionable doctrine, and the evidence here adduced in its support is certainly insufficient, and even, in great part, irrelevant. I believe that instinct differs from reason, not merely in degree, surely, for in some of its manifestations, as has just been shown, it is evidently the superior, but in kind; that it is given to the brutes as a substitute for reason; that in truth, the two faculties exist in inverse ratio to each other; and as at the bottom of the scale, in

the lowest animal, there is certainly no trace of reason, so at the top, in man, there is no vestige of instinct. In his consciously voluntary acts, man is left entirely to the teachings of experience, and never consciously employs means for a useful end without having first perceived their fitness for that end. Under the influence of habit, it is true, this perception of the relation of the means to the end may gradually fall out of consciousness, and he may seem to continue the action mechanically; but always reason is necessary for the first formation of the habit. We have so perfectly learned to walk and to write, for example, that we cease to be aware of the series of volitions necessary for taking each step and forming each letter; but the young child slowly acquires these useful habits through distinct conscious efforts. Of all the instances cited by Hartmann, in his attempt to prove that the human mind possesses instincts properly so called, not one conforms to his own definition of instinct, that it is "acting in conformity to a purpose without any consciousness of that purpose." They are cases only of natural and primitive emotions and appetites, which dictate, indeed, the end to be pursued, but do not guide us in selecting the right means for its attainment; on the contrary, too frequently the stronger the feeling or desire, the more mistaken we are in our eager attempts to gratify it, which often defeat the very purpose we have in view. Instinct makes no such blunders. Thus, Hartmann appeals to the strong primitive emotions of maternal love, pity for distress, gratitude, shame, fear of death, etc. But these are no guiding instincts; for when most under the influence of them, people blunder wofully, and generally adopt any course rather than the best one for satisfying them. Hartmann even argues, that the sexual appetite is an instinct, because it really has a useful purpose, that of continuing and multiplying the species, though it is gratified only as a blind impulse. A Malthusian will not admit the force of this argument, and it directly controverts its author's own theory of Pessimism.

The ablest and best portions of Hartmann's second book are those in which he points out the necessity of the action of "the Unconscious" in the origin of language, and in what is strictly called "Thought." In respect to Language, it is only putting his theory into other words to say, that he maintains what the old fable of Prometheus so beautifully teaches concerning the origin of Fire, that it is the immediate gift of heaven. Even the lowest savages are never found without this divine endowment, this necessary prerequisite for progress, this *conditio sine qua non* for

any advance in civilization. Not one of the animals below man seems to have any capacity for it, or any rudiments out of which it could possibly be constructed. Several of them may be taught to articulate words with perfect distinctness; but not one, by any amount of painstaking instruction, can be enabled *to talk*, that is, to join words together with appropriateness, and evident perception of their relative meaning, into an intelligible proposition; and this for good cause, because they are entirely devoid of that power, the faculty of Thought strictly so called, by which alone the relations of words with each other, and of words with things, can be at all apprehended. When words are taken separately, and so out of relation to each other, they are merely the elements of speech not yet developed or fully constructed; Language properly so called begins to exist with the Proposition, and therefore consists in a synthesis of words. To recur to a former illustration, if a pig could only be enabled to say to himself, or to others, "I am a pig," he would, *ipso facto*, cease to be a pig. On the other hand, Laura Bridgeman, blind, deaf, and dumb from infancy, and having only a very imperfect sense of smell, can now write a good letter and keep up a sensible conversation, through her fingers, on any topic. Let Mr. Darwin do as much for dog, elephant, or chimpanzee, as Dr. S. G. Howe did for Laura Bridgeman, and he will convert the world to Darwinism.

Any one at all acquainted with the history of Philosophy, says Hartmann, must have learned how much it owes to the analysis of the structure of language, and to the study of grammatical forms. Most of the fundamental principles of logic, psychology, and metaphysics are, so to speak, imbedded and innate in the wonderful mechanism of speech. They belong to language as such, because they constitute its very essence; and hence they are found alike in the rudest, and in the most highly developed, tongues. Schelling rightly argues, that consciousness does not become possible except through language, and therefore the origin of language must have antedated the birth of consciousness. In every form of human speech we find the necessary elements for constructing a proposition; that is to say, we find Subject clearly distinguished from Predicate, Subject from Object, Substantive from Verb and Adjective. If the language is not far enough developed to express these distinctions through inflectional forms, they are at least intelligibly indicated through the relative position of the words in a sentence. Hence they are, and always have been, just as familiar to the native Australian and the Hottentot, as to a

Bopp or a Grimm. If they had not been innate in Laura Bridgeman's soul, Dr. Howe never could have found them there, or enabled her to express them in a finger-alphabet, when the sense of touch was the only medium of communication between teacher and pupil. When the human mind for the first time wondered at itself, and began to philosophize, it found itself already provided with language containing a rich store of abstract ideas and nice distinctions and classifications of thought; and as Kant remarks, "a great part, perhaps the greatest part, of the subsequent business of reason has been to analyze and take account of what it thus found preëxistent and familiar to use in its own modes of expression."

The conception of *judgment*, as a distinct mental process, is directly abstracted from the verbal *proposition*, merely discarding the form of words; the Category of Substance and Attribute is derived in the same manner from Subject and Predicate; the enthymeme, which is the concise form of the *syllogism*, is still more tightly packed up in the word "therefore," *ergo*, and its equivalents. Hartmann says, "to discover and nicely discriminate the mental process which is the counterpart of the grammatical distinction between Substantive and Verb, is still an unsolved, and perhaps very fruitful, philosophical problem; in this particular, conscious speculation is still far behind the unconscious creation of the genius of humanity." No new relations of ideas are forged or invented, when metaphysical analysis first brings into clear consciousness the distinctions and processes which are wrapped up in verbal forms as their garments. Philosophy has only to develop and distinctly enunciate what language offers to it in a crude state, or in the germ. Nascent philosophy finds lying before it abundant material, already thought out and prepared for its use, in the cases of declension, in the voices, tenses, and moods of the verb, and in a rich treasure of word-concepts, expressive, through their etymological forms, of the fundamental divisions and relations of thought. The primitive ideas with which psychology and ontology have to deal are found expressed in all languages by words which signify Being, Phenomenon, Becoming, Understanding, Thinking, Feeling, Desiring, Ought, Motion, Force, Power, Cause, and the like; and there is work enough for many centuries yet to come, before this treasure-house of the Unconscious speculation of the race will be exhausted. Who taught the rude Germans, as yet wandering in the depths of their Hercynian forest, to designate Cause as *Ursache*, "the primitive business or thing," answering to the Latin *causa* and

Italian *cosa;* or Judgment as *Urtheil,* "the primitive sentence of partition," as between plaintiff and defendant, or between subject and attribute; or Notion (*Concept*) as *Begriff,* "a grasping together" of several attributes and things into one general idea? The student of Greek will easily add to these few many other curious examples from the terminology of Plato and Aristotle.

Hartmann maintains, that as the groundwork or general structure of Language is far too intricate and comprehensive to have been built up by one man, it must have been a work of the masses, or the people at large; and that it is also too nicely arranged, and uniform in plan, to have been produced by the conscious labor of several persons working in concert. Only an instinct of the masses can have created it, such as we see exemplified in the joint industry of a hive of bees or a community of ants. The process of development, also, in the whole family of languages, is essentially one and the same, both up to the period of culmination of each, and then through its successive stages of decline and degradation. He further insists, that what we may call the metaphysics or philosophy of the Unconscious, as embodied in Language, far from being perfected by the advancing culture and civilization of the people, attains its ripest development and most distinct expression at a very early period, in prehistoric times, as in the case of Sanskrit, and thenceforward becomes gradually deteriorated, through the resolution of inflectional forms, the grinding down of consonantal sounds, the invasion of foreign elements, and a general decay in point of simplicity, force, and pregnancy of expression. Speech no longer so faithfully mirrors the primitive and unconscious thought of the race; it becomes perverted, as manners often are, by an excess of conscious effort, by straining after refinement, and by the corrupting tendencies of fashion and precept. The Categories of Aristotle are an exhaustive enumeration of the germs of all metaphysical and logical speculation; and according to Trendelenburg, who is followed by Dean Mansel, these Categories are only "the different modes of naming things, classified primarily according to the grammatical distinctions of speech, and gained, not from the observation of objects, but from the analysis of assertions." Kant attempted a similar generalization from an exclusively subjective point of view; and his Categories, as we have seen, merely express the twelve Forms of Judgment, which result from a logical analysis of the Proposition, as the necessary Form of the synthesis of words into a Language.

In passing to a consideration of the action of the Unconscious

in Thought strictly so called, we make a hardly perceptible transition, since Language is in great part only the expression and embodiment of Thought. As I have elsewhere remarked,[1] Words are not only signs and preservatives, they are also substitutes, for Thought; and this peculiarity of Language is an excellence or defect in it, according as it is, or is not, judiciously used. Hence it may be said that the use of Language gives us the power of thinking in short-hand; words are stenographic thoughts. This abbreviated expression of thought is a great help to the memory; and thus Language is the great repository of Thought, not only in books, but in our own minds. So the algebraist easily recalls to mind a few brief formulas, which enable him to perform almost mechanically long numerical computations, which the arithmetician must slowly and painfully think out step by step. This *symbolic* knowledge, as it was termed by Leibnitz, bears about the same relation to the full thought, of which it is the abbreviated expression, that our ordinary cursive handwriting does to an ideographic system, or to the picture-writing of the Mexicans.

In respect to the processes of reminiscence, reasoning, induction, discovery, composition, invention, and several others, Hartmann justly observes, that every thing depends on the right thought occurring to one at the right moment. And this happy suggestion is invariably the work of the Unconscious. Vainly do we rack our brains with persistent conscious effort and research to find the word for the riddle or the solution of the problem; it will not come at our bidding. And then suddenly, perhaps after a considerable interval of time, during which we had discharged the subject from our thought, and perhaps when we were idly musing on some other theme, just what we wanted flashes upon us as by inspiration. The man of science is quite as dependent as the poet, or the wit, on these gleams of light coming from the Unconscious. Archimedes stepping out of a bath, or Newton idly gazing when an apple falls from the tree, suddenly calls out, Eureka! and the problem, which may have perplexed him half a lifetime, is spontaneously solved. What remains is easy enough, and may be slowly elaborated in conscious thought; it is only, through the reasoning process, to bring the new truths into harmony with those previously known, and thereby to determine their classification and place in a system. The premises being given in

[1] *A Treatise on Logic, or The Laws of Pure Thought, comprising both the Aristotelic and Hamiltonian Analyses of Logical Forms, and some Chapters of Applied Logic.* By F. Bowen. Cambridge. C. W. Sever. 1864. p. 24.

immediate intuition, through inspiration from the Unconscious, the right inference from them follows, as it were, mechanically, being drawn as easily and correctly by a simpleton as by a man of genius; in fact, says Hartmann, it follows necessarily, just as a ball propelled by two forces *must* move on the diagonal which is the resultant of their combined directions.

We can easily see that the aid of the Unconscious is indispensable in order to furnish the right thought at the right moment, when we consider the nature of Memory, and the vast accumulations, the almost countless wealth, which it constantly has at hand. In most of the psychological theories which have been framed to explain remembrance, especially in those which are of a physiological and materialistic character, it seems to have been taken for granted that the principal, if not the only, fact which needs to be accounted for, is the *retentive* power of mind, or its power of holding in a firm grasp for many years the countless individual facts and general truths which have gradually been amassed by the cumulative labors and experiences of a lifetime. But it is not so; the real marvel in the case is the *reproductive* faculty when occasion requires, the wonderful power of Memory, unembarrassed by its immense riches, instantly to put its hand on just what it wants. Herein does the acquired knowledge of a man of genius, a Scaliger or a Macaulay, differ from the lumber accumulated by a learned fool, in that it all lies at instant command. The laws of association offer no explanation of the fact, but are merely a statement and classification of the phenomena needing to be explained; they tell us *how*, but not *why*, we remember. Just so, physical laws do not *govern* material events, or exert on them any agency whatever, but merely classify and describe them. Now, observe that all the vast stores of Memory are only figuratively said to be actually present in the mind; they are latent, they are only potential wealth. They are all the property of "the Unconscious," whose treasure-house is nobody knows where. Out of the skies, out of the depths, suddenly comes back upon us the long-lost remembrance of the scenes of our youth; and though events now passing around us quickly fade for the present from our mental vision, —

"Forsan et hæc olim meminisse juvabit."

The hypothesis of the materialist avails nothing, or rather serves only to render the phenomenon more mysterious and inscrutable. Granted, if you will, that each event of observation is at once

stamped ineffaceably upon the brain; then, the imprint being always there, why does it quickly cease to be visible? Why does it entirely pass out of consciousness for many years, and then what mysterious power suddenly brings it back in its pristine distinctness, still sharply defined, unblurred by the myriads of observed facts meanwhile impressed upon the same limited surface? Familiar as it is, this alternate lighting up and fading out of conscious remembrance is the most marvellous fact in our mental constitution; in view of it, every reflecting person must stand amazed at himself.

Monist as he is, ultimately resolving matter itself into the combined Will and Intellect of the Unconscious, Hartmann is still just as crass a materialist as Herbert Spencer, and maintains that the phenomena of memory may all be traced to the action of the nervous system. It is wonderful that he fails to see, that herein his theory is not only inconsistent with itself, but is unintelligible when regarded as an attempted explanation of the facts. Since the brain is a material structure, impressions made upon it can be distinguished from each other only in shape or outline, and processes generated in it can be only modes of molecular motion. External visible objects and events can be outlined by an artist, impressed in wax, cut in marble, or stamped on the brain. But how can we outline or paint, or what "dance of atoms" will faithfully represent, articulate sounds, odors, abstract ideas, emotions, or processes of pure thought? These can become impressions on the brain, that is, can be visibly or tangibly presented, only through arbitrary signs, or such merely conventional symbols as letters and words. Adopt such means, then, and the inquiry immediately arises, what language, what alphabet, what sort of characters, does the stamping power of "the Unconscious" employ. Does it write German text or an Italian hand? Is it master of a good style, or does it even spell correctly? For we must remember, that the emotions and abstract thoughts of the unlettered peasant, just as much as those of the philosopher, need to be imprinted on the brain. Even if we jump these difficulties, and suppose all to be fairly written out on the pulpy surface of the cerebrum, we must farther imagine the record to be blurred or faded out for many years, and then marvellously brightened into visibility again, when some reminding word or incident comes like a vapor bath of iodine to a sun picture. And when all this is accomplished, we still need an eye inside of the skull to see the writing, a mind to comprehend it, and a conviction in that mind that

the feelings and thoughts thus inscribed are old acquaintances, mere copies from former experience. Let the physiologist or chemist contrive what mechanism he may; if an indivisible Ego of consciousness is not allowed to come in, the machine will not work. The automaton won't play chess, if an Ego be not smuggled into the cupboard.

But it is farther argued, that the cud of thought is never entirely lost, the succession of ideas being incessant, swift, and involuntary; and this looks mechanical. We answer, that the psychologists do not dispute the fact; all admit, that the association of ideas is not directly controlled by the will, but is in great part arbitrary, sometimes whimsical and grotesque. Poets and wits are well aware of this spontaneity of thought, and often there is something uncanny in the use which they make of such inspirations. But attention is voluntary, and selection is possible; and thereby, indirectly, we change the whole current of thought at will. We arrest the flow when we please, and thus force the river into a different channel. No one allows his thoughts always to drift at random, as they often do in aimless reverie or a dream. But the action of the Unconscious, which is the fountain that keeps the river always full, and generally determines whether its waters shall be bitter or sweet, and which way they shall run, is often checked and controlled by the conscious Ego, that asserts its sovereignty, and easily dominates the whole course of thought. If consciousness is to be believed when it asserts the train of thought to be spontaneous, capricious, and necessary, is it not equally to be trusted when it affirms attention and selection to be deliberate, voluntary, and free, thus manifesting the power of the individual mind to control its own action?

We need to have an adequate conception of the magnitude and importance of the work which memory has to do, before we can rightly understand how far its operation depends upon "that power not ourselves," which Hartmann calls "the Unconscious." An obvious illustration will make this point clear. Many educated persons, in this country as well as in England, know enough of at least four languages, Latin, French, German or Italian, and English, to be able to read any common book in either of them with about equal facility. The whole number of English words, not including purely technical terms or mere derivatives, is at least 40,000; and that portion of the vocabulary of either of the other three languages, which is at the command of a well-educated foreigner, is probably half as large. Among the treasures of mem-

ory in such a mind, therefore, must be reckoned at least 100,000 mere words, all of which, with some trifling exceptions for onomatopœia, are symbols as arbitrary as the signs in algebra. What a countless multitude of individual facts and familiar truths in science and ordinary life are either wrapped up in these words, or exist side by side with them, in any well-informed mind! Certainly such a mind is far more richly stocked with words and ideas than the British Museum is with books. That admirably managed institution, suffering from the embarrassment of riches, maintains a full staff of well-trained librarians; and one of them, after rummaging the catalogue and the shelves for perhaps ten minutes, will triumphantly produce any volume that may be called for. But the single invisible librarian, who awaits our orders in the crowded chambers of the Memory, is far more speedy and skilful in his service. A student reads a page of French or German in a minute, and for each of the two or three hundred groups of hieroglyphics printed on it, "the Unconscious" *instantly* furnishes us whatever we call for, either its meaning, or its etymology, or its English equivalent, or its grammatical relations to other groups in the same sentence, or any of the associated ideas in a little world of knowledge of which this one word forms the centre. We have no conscious clew with which to direct ourselves in the search; it is enough that we have an interest in the point to be remembered, that *we need it* for the work which is in hand, and instantly it is produced out of the vast repository. I think this single illustration sufficiently proves the presence and agency of "the Unconscious," and sufficiently disproves the shallow and stupid theory of the materialists with which Hartmann has needlessly burdened his system. For what merely mechanical or chemical action is conceivable as a possible explanation of the phenomena in question?

Thus far I have endeavored to follow step by step, and in some detail, the long array of evidence, the great accumulation of facts and arguments distributed under many heads, through which Hartman seeks by the inductive method, and on strictly scientific principles, to establish the leading doctrine of his Philosophy. But the material is so abundant, and the subject itself so far-reaching and comprehensive, that in the very limited space yet remaining at my command, this attempt at an exhaustive consideration of it cannot be carried farther. In fact, as Hartmann himself remarks, each of the thirty-six chapters constituting his work may be regarded as an independent and tolerably complete treatise on some

physical or moral science, some special branch of philosophy, which admits of study and criticism by itself, apart from its connection with the other portions of his system. And his own treatment of each of these themes includes so much, and is kept within so narrow limits by great condensation of matter and conciseness of expression, that any farther abridgment of it is hardly practicable without sacrificing much that is essential for a fair development of his thought. Having tracked his progress pretty closely in twelve of the earlier and shorter chapters, I must hurry through the rest of his work, merely indicating by name many of the subjects which remain, and endeavoring to select a few of the more interesting and characteristic points which ought to be noticed with some detail.

The mental faculties are usually distributed into three large groups, designated respectively as the Intellect, the Sensibility, and the Will. The Philosophy of the Unconscious is concerned exclusively with the first and the third of these powers; and Hartmann argues with great ingenuity and acuteness, that the feelings and emotions placed under the second head ought not to form a separate class, since they are only modes of Will and Intellect acting together in processes of the Unconscious. Briefly expressed, the theory is, that all our passions may be resolved into mere Pleasure or Pain, since they express only conformity or disagreement with the Will; all that appears peculiar in any one of them is due to the Intellect's conscious or unconscious perception of the *content* of the Will, or the real motive of the volition, which is often a secret even to ourselves, and also to a knowledge of the circumstances attendant upon the gratification or non-gratification of the ruling desire or volition of the moment. Tooth-ache is distinguished from ear-ache simply by our *perception* of the different locality and the relative intensity of the Pain endured. There are no qualitative, but only quantitative, distinctions between different Pleasures and different Pains; the intensity of either depends upon the vehemence or strength of the volition, often an unconscious one, which is favored or crossed. Many sensations are indifferent to us at their ordinary pitch, being neither grateful nor irksome; but if, while remaining qualitatively the same, they are greatly changed in degree, intense pain or pleasure may result. Thus, the ordinary effect of light upon the eye is indifferent to us; but if intense, as from the sun at noon, it becomes very painful. We wrongly consider the perception, which is an act of the Intellect, as the cause of the pain, which is

a manifestation of Will, because the two usually go together, or are simultaneous. The pain may be either continuous or intermittent; and most of its distinctions, which are supposed to be differences in kind, result from our knowledge of the various modes of remission, or of the causes of our unpleasant feeling. Thus, we describe a bodily pain, first by its locality, and then as throbbing, darting, cutting, gnawing, biting, etc. Moreover, we weigh different enjoyments and pains against each other; and since like can only be measured by like, this would not be possible, if they were not qualitatively equal or similar, and only quantitatively different. We decide either to bear the toothache some days longer, or permit the cause of anguish to be pulled out; and to spend a small sum either in buying a book, procuring a ride, or visiting the theatre.

Mental pleasures also consist in gratified volitions, and mental pains in the frustration of the Will. The pain we feel at the death of a dear friend, Hartmann coolly argues, is precisely similar in kind to the toothache; and it depends upon the strength of our attachment to him, that is, on the vehemence with which we willed his continued presence, which is the more acute. One may be more lasting than the other, it is true; but that also is a difference in quantity only. Here, too, the chief argument is, that we weigh mental pleasures against sensual ones, which would not be possible if they were unlike in quality; for "we do not weigh hay with straw, or pecks with pounds." The intrinsic commensurability of the two classes, which appears in language from the sameness of name which we give to all sorts of pain and pleasure, must therefore be accepted unconditionally as a fact; and it holds not only for the various sorts of sensual enjoyment, but for the gratifications of sense as compared with those of the intellect. In both cases, what is really gratified is the Will, the intensity of the pleasure depending upon the strength or energy of the volition. Thus, he says, "a man hesitates between two equally wealthy sisters which to choose for his wife, the one plain in feature, but quick-witted and sensible, and the other a pretty fool; and according as mere sensual desire or intellectual taste predominates, his choice is determined." Whatever is obscure, inexplicable, and ineffable in the nature of feeling and emotion, he argues, proceeds from the unconscious mental states, whether of will or intellect, out of which they arise or by which they are accompanied. We often do not know what we really desire; and only the pain or pleasure, which comes after the event, instructs us as to the true character of our

will. Our self-respect prevents us from consciously wishing the death of a near relative, whose property we are to inherit; but after he is taken away, we find to our shame that the loss does not grieve us as it ought. Or we fancy that we have ceased to mourn for a friend supposed long ago to have been lost at sea; but the transport of joy into which we are thrown by his sudden re-appearance proves that we have been all the while unconsciously longing for him to come back again.

In his theory of the action of the Unconscious in our æsthetic judgments and the productions of art, Hartmann takes middle ground between the doctrine of the idealists and that of the empiricists. According to the former, which is in the main that of Plato, there is innate in the human soul an Idea of the Beautiful, from which in each department of art is constructed an Ideal; and in proportion to its conformity with this type, any object or creation is adjudged to possess beauty. But the empiricists maintain, that in the works of art which come the nearest to this pretended Ideal, no elements are to be found which did not preëxist in nature, though in combination with other ingredients which partially mar their effect; and that the vocation of the artist is to distinguish and eliminate these deformed and injurious adjuncts, and bring together only what can excite unmixed admiration and pleasure. Hartmann says, that each of these theories is partly right and partly wrong. The idealists are right in holding that the process of creating an Ideal lies behind or above consciousness, so that, in this sense, the æsthetical judgment is *a priori;* but they are wrong in regarding this Ideal as a pure abstraction, an indeterminate unit, originating we know not how, — a direct gift from heaven. On the contrary, the Beautiful, since it is intuitively perceived by Sense, must exist in countless individual and determinate forms and concrete manifestations. The Ideal is not one, but many; that of humanity, for instance, must include both a masculine and a feminine Type; and in the former, must be found the Ideal of infancy, childhood, youth, manhood, and old age; also, the Ideal of a Hercules, an Odysseus, a Zeus, etc. To maintain the eternal existence of all these distinct and concrete ideal forms, infinitely numerous as they are, would be to assert the reality, not of the single miracle of one abstract Ideal, but of numberless individual miracles. Rather the creative process of each takes place in the Unconscious, and the special Ideal first appears fully formed, concrete and determinate, as an inspiration to the mind of the individual artist. Its source is not from without, as the empiricist vainly supposes, but from

within, in the instinctive and preconscious selection and arrangement of the fittest elements to impart æsthetic pleasure.

In the chapter on Character and Morality, a similar theory is propounded respecting the unconscious formation of rules of conduct, really generated by repeated observation of what is beneficial for the individual and society, but first manifested to the conscious intellect when completely formed and put together, and thus appearing as an *a priori* revelation of the Moral Law within the breast, and claiming supreme authority as the voice of conscience, because its origin is unknown. Volitions as such, Hartmann maintains, differ from each other only in intensity; all the other apparent distinctions between them relate only to their *content*, that is, to their Motive, or the end and purpose which the Will has in view and strives to accomplish. But the apprehension of Motives is the work of the Intellect; and according as this faculty holds up before the Will various objects of desire, such as sensual enjoyment, wealth, honor, reputation, learning, success in art, or in love, etc., volitions are more frequently and strenuously directed to one or the other of them, and the individual is said to be covetous, licentious, vain, proud, ambitious, eager to learn, and the like. Which motive will be habitually preferred, or which will be chosen in any one case under given circumstances, we can certainly know only through observation of the result, by experience. We can learn what our own character is, only in the same way in which we study the character of our fellow-man, by reasoning back from what is actually done to the probable motive which induced the action, and hence to the habitual strength of the desire which caused that special motive to predominate. We can never tell beforehand with certainty how a particular motive will operate on different men; nay, we know not, previous to the trial, what influence it will have over ourselves. Often our firmest resolutions, our most deliberately formed plans, are scattered like chaff before the wind, when the true Will comes forth out of the night of the Unconscious, and announces its decision. Hartmann seems to adopt the doctrine of Kant respecting each man's Intelligible Character, which is born with him and forms the inmost kernel of his being, which is the groundwork on which his empirical or acquired Character is subsequently built up, and therefore determines what power a given motive shall have over him in any particular case. Rules of conduct, whether dictated by prudence or conscience, must be classed with the other motives held up by the Understanding before the Will, with the expectation, often a vain one, of thereby

influencing its decision. The consideration of this subject is avowedly left imperfect, as Hartmann does not profess in this work to have elaborated a theory of Ethics.

I pass over a curious chapter on Mysticism, in which, as it seems to me on very insufficient grounds, Hartmann attempts to prove, that the germs both of all philosophy and all revealed religion are to be found in the heated fancies of the Mystics, these fancies again being due to inspirations from the Unconscious. The evidence adduced goes far enough only to confirm a text of Scripture, which he unconsciously labors to establish, that "the prophecy came not in old time by the will of man; but holy men of God spake as they were moved by the Holy Ghost." Also, a chapter on the action of the Unconscious in History need not detain us here, since it contains only the speculations of the writer on a topic which has been worn threadbare of late years, because it is a favorite theme with the evolutionists and the fatalists, which they have pretentiously designated as Sociology, or the Science of History. It claims to be regarded as an exact science; but as no two of the numerous theories which have been constructed about it bear even a remote resemblance to each other, people generally have no wish to discuss the validity of its pretensions. They are content to leave that task to those who have succeeded to their own satisfaction in harmonizing with each other the doctrines upon this "scientific" subject maintained respectively by Comte, Buckle, Hartmann, Herbert Spencer, and a dozen other English and German speculatists. The conclusion at which Hartmann arrives may be presented here, as it is a summary of his whole doctrine upon this subject.

"The Greeks, Romans, and Mohammedans are quite right in their conception of an εἱμαρμένη, or Fate, in so far as this signifies the necessity of every event regarded as the effect of its immediate cause, so that every link in the chain is dependent on that which precedes it, and therefore the whole succession is foreordained and determined through its first member. Christianity is right in its belief in a Providence, since every event takes place in perfect conformity with the foresight and intention of an absolutely wise directing Cause; that is, as a means for carrying out the purposes of the never-erring Unconscious, which is Reason itself. At any moment, only one event can be logically right and best; and this one is just what must happen, for it is as necessary as it is wisely conformed to the end in view. Finally, the modern doctrine of the rationalistic empiricists is right, that History is

exclusively the result of the spontaneous action of individuals acting in accordance with psychological laws, without any miracle resulting from the interference of higher powers. But the upholders of the first two theories are wrong in denying Spontaneity, while those of the third system are wrong in denying Fate and Providence; for the union of all three first constitutes the truth." The doctrine thus stated harmonizes so perfectly with the conclusions of Leibnitz upon the same subject, that I doubt not every word of it would have been accepted by that great thinker.

After all that has been said about the importance and even the indispensableness of the action of the Unconscious, when Hartmann comes to consider its functions relatively, he still decides that Consciousness is the higher and more valuable of the two agencies, since all progress, both of the individual and of the race, depends on enlarging and cultivating the sphere of its influence. Each acts within its own well-defined province, and at any one time, neither can encroach upon the other, except to a limited degree. And yet the welfare of man and the ultimate redemption of humanity from the misery of existence can be promoted only by conscious effort, by gradually encroaching upon the limits of the Unconscious, and converting instinctive action into thoughtful and well-considered endeavor. But how is this possible, on the theory here adopted, that a volition in any given case is the mysterious and necessary reaction of the Intelligible Character upon the motives held out to it, which takes place wholly in the realm of the Unconscious? By conscious and thoughtful consideration of the motives to be presented, Hartmann answers; by selecting and laying stress on those which we have found from experience to be most efficient in determining the action of the Will. We cannot directly shape our desires and volitions; but we can do so indirectly, by cultivating conscious reflection upon the reasons, principles, and inducements which are most apt to guide our actions aright. Hereby, the conscious Intellect, through thoughtful deliberation, can widen its sphere of influence, and profitably determine conduct. Hereby, through forming habits of acting only upon well considered motives, we can bring about a beneficial change of character. We can prevent passion from blinding the judgment. We can prevent the indulgence of heedlessness and inattention on the one hand, and of indecision and indeterminateness on the other; and can educate ourselves to act only upon a well-considered plan of conduct, instead of blindly following the impulses of the moment. The proper choice of a

profession, of the modes of employing our leisure, of our friendships and social intercourse, also depends upon our conscious and deliberate thought. Much of the profitable exercise of intellect in the search after truth, and in æsthetic culture, also falls within the sphere of Consciousness.

"This harm, at least, results from abandoning ourselves entirely to the Unconscious; that one never distinctly knows how much he has, or what he is aiming at; that he gropes round in the dark, while carrying the lantern of Consciousness in his pocket; that it is left to chance whether an inspiration from the Unconscious will come when it is most wanted; that he has no criterion but the result, from which to judge what is a happy suggestion from the Unconscious, and what is the mere dictate of a freakish fancy, or which feeling or impulse he can trust, and which not; and finally, that he does not exercise his faculty of conscious judgment and reflection, which he can never safely do without, and then, when an emergency arises, he must put up with poor analogies, instead of rational inferences and comprehensive views. Only what is conscious is known to be properly our own; while the Unconscious appears as something incomprehensible, and as a foreign agency, upon whose favor one is dependent. While we have our conscious faculty as a ready servant, always at hand, and whose obedience can be enforced, the Unconscious slips out of our grasp like a fairy, and always has something of an impish and unearthly aspect. What is done with Consciousness I can be proud of, as my own act, brought about by the sweat of my brow, while the performance of the Unconscious is, as it were, a gift from the gods, and as any man is merely its favored messenger, it can only teach him humility. What is inspired by the Unconscious is complete as soon as it comes, is subject to no estimate of its value, but must be accepted just as it is; while the Conscious is its own standard, it judges and improves itself, and it may be changed at any moment, as soon as newly acquired knowledge or a change of circumstances requires. I know what there is of good, and what is defective, in my consciously acquired result; and therefore it gives me a feeling of security, because I know precisely what I have, and also a feeling of modesty, because I know that this is still incomplete. There can be no improvement in the work done by the Unconscious, for its earliest as well as its latest inspirations are involuntary. But Consciousness contains in itself the infinite perfectibility both of the individual and of the race, and therefore constantly prompts to gladsome and endless efforts at self-improvement."

CHAPTER XXIV.

Hartmann's Metaphysics of the Unconscious.

The doctrine of Kant respecting Time and Space, that they are known *a priori*, because they are subjective Forms of the faculty of Sense, was illogically converted by him, as we have seen, into the skeptical assumption that they are *only* subjective, and therefore, in their objective aspect, are unreal and illusory. He arbitrarily assumes, that there is no correspondence between the world of things as they really are, and that of things as they appear to us; though his premises afford no ground whatever for this extension of the doctrine, for the same incompetency of our faculties, which prevents us from asserting that things really are as they appear to us, equally forbids us to maintain that they are *not* as they appear. As necessary inferences from this theory that Space and Time have no reality outside of the mind which thinks them, we have, first, a system of thorough-going Idealism, or Solipsismus, and, secondly, one of Monism, or the absolute Unity of all things. Without Space, there is no coexistence, but the universe is contracted to a mathematical point, which is nowhere and has no relation to anything beyond itself; without Time, there is no successive existence, but the past and the future shrink into the indivisible present; and even this disappears as soon as it begins to be.

Hartmann here parts company both with Kant and Schopenhauer. In a certain sense, he maintains the objective reality both of Space and Time, and of the universe of external things, as perceived in them through the senses and the brain. But we soon find that this so-called "objective reality" is only apparent, — only the phenomenality, or outward expression and manifestation, of the Unconscious, which is absolutely One and All. On the surface of his doctrine, Hartmann is not only a decided realist, but as crass a materialist as Büchner; and yet, when we come to sound the metaphysics of his system to its foundation and inmost essence, we find him both an Idealist and Monist, and as earnest and thor-

ough-going in both respects as Hegel or Schopenhauer. But of this hereafter; as yet, we have to do with his philosophy only in its realistic aspect, and under the Forms of sense.

In opposition to Kant, he maintains that Space and Time are Forms of real Being, as well as of conscious Thought; that Time is directly intuited by experience, and is therefore *a posteriori* in its origin, being made immediately perceptible by the inward sense through successive and continuous vibrations in the brain; and that Space, though *a priori* so far as consciousness is concerned, is previously constructed by a synthetic act, for a definite purpose, by a purely spiritual function of the Unconscious. Inverting the usual course of the argument, Hartmann first reasons inductively, from the probabilities of the case, in favor of the actual existence of material things outside of the mind, and then infers the reality of Space and Time, because they are necessary conditions of such existence. Against the supposition of the Idealist, that the Ego fashions for itself a dream-world out of its own imaginings, he argues very plausibly, that our perceptions are often entirely novel, taking us by surprise, while the known creations of mere fancy are made up entirely from familiar elements; that the eyes must be opened and the ears unstopped, before the external scene enters, whereas mere imagination plays its freaks equally well in dark and silent places; that fancy acts only in accordance with the laws of the association of ideas, while impressions on the senses often startle us by their suddenness and seeming want of conformity to law; that the different senses, through their simultaneous testimony to the same object, as when we at once see, touch, taste, and smell an apple, confirm each other; that external things operate not only upon our organs of sense, but upon each other, according to perfectly definite laws, though there is no reason why mere fancy should attribute to them any such uniformity of action; that imagined perceptions can by the conscious Will be called up, continued, and repeated at pleasure, while those which present themselves as actual are entirely independent of the Will; and finally, that every Ego perceives a multitude of other bodies resembling his own, each seemingly animated by a mind like his own, each having a similar experience with himself of the vicissitudes of life, and making essentially the same report as to the evidence of their senses and their consciousness respecting the outer and the inner world. Induction from such facts as these leaves an overwhelming weight of probability in favor of the belief that I live, not in a dream-world built up out of my own

fancies, but in one as real as my own existence. The perceptions of sense are not created by me, but are forced upon me from the outer world, and are plainly distinguishable from the creatures of my imagination, which can be summoned up at pleasure. Then Time and Space are also real, for without them the external universe could not be. The vulgar are right, and the would-be philosophical Idealists, who cheat themselves with the fancy of a fancied world, are wrong.

And yet, Kant is right in maintaining that Space (not Time) is not directly perceived either by sight or touch, but that it is, to consciousness at least, a subjective and *a priori* Form of sense. It is, however, a creation of mind anterior to consciousness. It is constructed by the Unconscious out of what Lotze calls "the local signs," *i. e.*, the various external circumstances and indications by which we are enabled to distinguish contact with the skin at one spot, from contact with it at another. We do not directly *see* even the image painted on the retina of the eye, as that would require another eye, back of the external one, in order to see it; we are not directly cognizant even of one spot on the surface of the brain, as distinct from another. But because the other sensations attendant on being touched *here* rather than *there* are dissimilar, the mind, in its preconscious stage, *infers* a difference of locality in order to account for the difference of feeling. Therefore the aid of the Unconscious is necessary before we can, out of our sensations, construct images or perceptions of external things. Just so, the formation of a single image from binocular vision is nothing else than an unconscious inference.

We have, then, what Hartmann calls a "real" — that is, an actually phenomenal — universe spread out before us in Space, peopled with innumerable beings and things, the events or changes occurring in it taking place according to physical laws, in Time; and the question almost forces itself upon us, What is it, and to what end? Why is it here? and why thus, rather than otherwise? What is its real inmost being and essence under all these phenomenal forms? And what is its significance, or for what Purpose does it exist? As we have already seen, there is not one living organism in it, animal or vegetable, however minute and lowly, which is not, in all its parts, formed, controlled, and directed by an intelligent Final Cause; and all these organisms, all beings and events, through the uniformity and universality of Law, are closely bound together into one whole, each operating upon and affected by every other. Then, what are the essence and

the ultimate leading Purpose of the universe as a whole? This is the question which Philosophy has to answer, and which she cannot blink without abdicating her office, and falling back into a state of shameless indolence and incuriousness.

Hartmann's answer is at least frank and explicit. The universe, he says, is a mere Form or manifestation of "the Unconscious," which it has assumed in order to rid itself of the burden of its miserable existence, by cheating itself into nothingness. This is the best answer, perhaps the only one, which an atheist and a Pessimist can arrive at, for it is a *reductio ad absurdum* of the principles that he started with.

We have first to consider in what sense, and by what means, the plurality of phenomenal being is reduced by Hartmann to the unity of the Unconscious. How can he be a decided Monist, in spite of the elaborate argument which he has just constructed in favor of the "real" existence in Space, outside of our minds, of the countless material things which constitute the outer world? His answer is, that the universe *is* independent of *our* thought, independent even of all human thought. It is not a *subjective* fancy of the percipient Ego of consciousness, not a dream-world arbitrarily fashioned by our own vain imaginings; but it is an *objective* manifestation of the Unconscious, which would continue to be "real," even if there were no eye to behold it, and no thought in which it could be reflected. The unity of the Unconscious is not destroyed by the countless multiplication of its phenomenal aspects, any more than the sun in the heavens ceases to be one, because its image is mirrored in innumerable pools and streams. Herbart is right in maintaining that the multiplicity of individual being is as broad and true as the reality of existence itself; but his mistake consists in failing to recognize the strictly phenomenal character of all reality and all existence. Subjective Idealism had a just presentiment that reality is only phenomenal; but it distorted and defaced this thought, because it recognized only a *subjective* phenomenality, whereby plurality was degraded into a merely personal illusion. In its essence and inmost nature, the universe is only an *objective* manifestation of one omnipresent Intellect and Will; but it is a "real" presentation to my thought in all its myriad forms, just as the image of the sun reflected in a brook is a "real" image; and it will continue to be thus manifested after my mind shall cease to be.

Then, what are Matter and Space *per se*, in their inmost being, apart from the phenomenal aspects under which they are mani-

fested to consciousness? Schopenhauer says, Matter consists only of the purely subjective forms of Time, Space, and Causality presented to Sense by the universal Will as visible and tangible; and therefore it is mere *Vorstellung*, a Presentation to thought, a mental picture. Hartmann says, Matter is the Will *and Intellect* of the Unconscious, made objective in what the physicists call "Force," which is only a manifestation of mind, a spiritualistic principle. Hence, like Berkeley, he does not idealize Matter in the sense of making it unreal, but only spiritualizes it. Force is *real* in the highest or absolute meaning of that term; for it is only Will and Intellect *in action*, and therefore it would continue both to be and to appear, though there were no brain, no human consciousness, to witness its activity. It was thus displayed and objectified in material forms, as we learn from geology, before any animal life appeared upon the earth.

In the chapter on "Matter as Will and Intellect," Hartmann presents an elegant and concise statement of the Atomic Theory, in the form in which it is now accepted by most physicists and chemists, and argues conclusively, that the "atom" thus conceived is merely a mathematical point, which is the seat of force, the assumption of an inert and material substratum of this force being an arbitrary and really unmeaning hypothesis. The conclusion at which he arrives agrees perfectly with the doctrine propounded, as far back as 1758, by Father Boscovich. Hartmann presents his conclusion in these words: "Matter is therefore a system of atomic forces in a certain state of equilibrium. From these atomic forces, in their various combinations and reactions, arise all the so-called forces of matter, such as gravitation, expansibility, crystallization, chemical affinity, etc. The lines of action of all the forces cut each other in a mathematical point, which we call the seat of force, and this seat is movable." The doctrine of Boscovich, as summed up by Dugald Stewart, is, that "the ultimate elements of which Matter is composed, are unextended atoms, or, in other words, mathematical points, endued with certain powers of attraction and repulsion; and it is from these powers that all the physical appearances of the universe arise. The effects, for example, which are vulgarly ascribed to actual contact, are all produced by repulsive forces, occupying those parts of space where *bodies* are perceived by our senses."

The attractive force of each atom, Hartmann argues, has a definite end and aim, *before* the result is produced by it of bringing another atom nearer; it must, therefore, be conceived as a striving

or effort, and the actual approximation of the two atoms to each other, an approximation not yet effected, as the purpose of this effort. In so far as the effect is already produced, the striving has come to an end, and no longer exists; only so far as the movement still remains as yet unrealized, is any effort to realize it possible. Hence, the movement, which is a definite one of approach with increasing velocity, must exist *in idea*, as the purpose of an intellect, before it exists *in reality*, as a result accomplished; otherwise, it would be an aimless effort, without any definite object, which is contrary to experience. Then the movement cannot be produced, as Schopenhauer supposes, by a mere blind Will or force acting vaguely, without reference to any particular result; but this Will must be accompanied and directed by Intellect, by which it is pointed, so to speak, to a preconceived and determinate end. Consequently, the atomic force, like every other action of the Unconscious, must be viewed as the joint expression of Will and Intellect acting together in inseparable union.

Having found what Matter is, *per se*, apart from its phenomenal manifestation, we have next to consider what the Space is, as being *per se*, in which all Matter exists. Hartmann has already proved, that *the idea* of Space in the human mind is constructed by the Unconscious out of "local signs," in such wise as to appear *a priori* to consciousness. But what is the external and objective manifestation, to which this idea corresponds? This also, we are told, is a creation of the Unconscious, which builds up both the idea, and what is called the "reality" of pure Space. If it is a mere Presentation to thought (*Vorstellung*), or mental picture, which first brings ideal Space before the mind, then the Space exists ideally in the Presentation, and this proves that the Presentation itself does not exist in the ideal Space. In other words, mental or cognitive action, as such, is wholly independent of Space; and it is absurd to ask after the particular locality, the presence chamber, of the intellect in the brain. Mind *is* wherever it *acts;* that is, it is ubiquitous to the whole nervous organism. The unconscious Will is that which realizes ideal Space, by adding to it "reality," or objective manifestation, which mere thought cannot give. Then, what we call "real" Space, as a creation of the Will, must be subsequent to that which creates it, and therefore the Will, as such, exists out of Space, whether the Space be considered as a mere Presentation to thought, or as a reality. Hence, both Intellect and Will are *unspacial* in their very nature, since the former creates Space in idea, and the latter creates it in "reality." It fol-

lows, therefore, that even the atomic Will, or what we call atomic force, exists outside of Space and independent of it; for as Schelling says, it is prior to extension.

It also exists outside of Time; for as we have seen, it is characteristic of the action of the Unconscious, that it never wavers or doubts, it needs no time for consideration, and it is independent of memory, since it acts unerringly as well before as after experience; therefore it does not, like conscious reason, proceed by comparison and inference, but it grasps the result instantaneously, through its infinite power of *Hellsehen* or *clairvoyance*, the conclusion being instinctively apprehended at once, not after the premises, nor through them, but *in* them, the whole logical process being completed by one act and in a single moment. The thought of the Unconscious, therefore, has no *duration* in Time; and though it is manifested only at a particular epoch, when an emergency arises, and therefore at a definite *date*, we must remember that this is the date, so far as we know, only of its manifestation in the world of phenomena, but not of its action *per se;* nay, the very act of its manifestation through some phenomenal *change* is that which first establishes a difference between one moment and another, that is, which first creates Time *as a phenomenon*, though not as absolute being. Try to imagine a universe at perfect rest, manifesting no change on its surface, no movement either of sun or star, even consciousness lapsing into quiescence, and therefore ceasing to be, because not cognizant of any variation of its state. In such a universe, as in dreamless sleep, one hour would be as a thousand years; Time would not even appear to be, since, to our apprehension at least, if not occupied by events or conscious thoughts, Time is a mere blank, is nothingness.

The realm of the Unconscious, therefore, like the Intelligible World of Kant, exists outside of Space and Time; and the doctrine of Monism, the essential Oneness of all things, follows as a necessary inference. Space collapses into a mathematical point; Time shrinks into the indivisible present moment; and One becomes identical with All. The Unconscious creates both of these phenomenal Forms, and thereby individualizes the objects and events which are manifested in them. Moreover, as we have just seen, the objects themselves, as they all consist of Matter in its various forms, whether organic or inorganic, from a clod of earth up to man, are also creations of the one omnipresent Will and Intellect; so that the universe is the mere expression of its action and its nature. Before we can fully understand the motive which led to

the formation of the universe and determined its character, we must consider Hartmann's theory of the origin of Consciousness, and its dependence upon molecular action in the brain.

That the cerebral hemispheres are to a certain extent the organ of some of our mental faculties, or that through which they act, is what no spiritualist thinks of denying; since he might as well deny that the eye and ear, together with the portions of the brain specially connected therewith, are the organs of visual and audible sensation. The language of Hartmann, that the brain, and the ganglia which perform in part certain functions of the brain, are *the conditions* of animal consciousness, even seems, if taken literally, to go hardly as far as this; since it amounts only to saying, that conscious mental action is so far *dependent* upon the state of certain portions of the nervous organism, that it cannot be manifested except through their agency. Of course not; we all know perfectly well, that when the brains are out, the man will die; and that when there is serious lesion or other disturbance of the brain, the patient often becomes unconscious. But Materialism pure and simple identifies the two kinds of action; it declares that molecular agitation or change in the cerebral hemispheres *is* sensation and thought, the two phenomena being merely two aspects of one and the same thing. I object to this doctrine, not merely that it is a blank hypothesis without any evidence in its favor, but that it is meaningless; it is equivalent to saying that a dance of atoms is a syllogism. Hartmann is prevented from accepting this absurd doctrine, because the very essence of his theory is, that Will and Intellect in the Unconscious first create the brain at a comparatively late stage of their manifestation. Without the previous independent action of Mind, not even space, time, or matter would have been manifested; there would not have been any brain. Hence, Hartmann is forced to adopt the conclusion, which had been previously enounced by Schelling, that the brain is the condition, or necessary prerequisite, for the origin, not of mind as such, but of Consciousness. Mind acts independently in the Unconscious; but it cannot become cognizant of itself, and therefore cannot be emancipated from its servitude to the Will, till it has deluded the Will into building up a brain.

Consciousness, says Hartmann, is not a continuous and fixed state, but a process; it is an action frequently repeated, a constant becoming conscious. Will and Intellect, as we have seen, are inseparably united in the Unconscious, which cannot have a determinate volition without *knowing* what it wills, nor a definite

conception or presentation to thought without instantly realizing it in act by an exertion of Will. Now the essence of Consciousness consists in breaking up this companionship, in sundering the union of the two faculties, by forcing upon the mind a novel perception which is not a purpose of its own volition, and therefore exists in opposition to the Will. Consciousness is the stupefaction of the Will at this violent intrusion upon its domain, this presence of an unexpected and unwelcome visitant. Because a brain has been constructed, an impression upon it from the world without, in spite of the opposition of the Will, has become possible. The Unconscious has objectively manifested itself by conjuring up an external universe for the very purpose of thus severing the union between the Intellect and the Will, and thus releasing the former from the misery entailed upon it through its hitherto indivisible connection with blind and unreasoning volition, that is, from an incessant striving and effort which is constant suffering. It looks forward to a state of unbroken calm, to quiet contemplation and rest unbroken by the feverous agitations of desire. To this end it has created space, and peopled it with countless living organisms, rising by imperceptible gradations from the lowest forms of vegetable life up to animal existence, and so on still upwards to man, in whose perfected brain pure conscious thought first becomes possible without any intermingling of volition or desire. The development of Consciousness, and, through that, the severance of Intellect from Will, is the guiding purpose of creation. Through Space and Time as *principia individuationis*, separate individual existences, as objective phenomena, first become possible; before these Forms were evolved, All was One, as it is still in essence. Through the independent action and reaction of these separate existences on each other, the human brain is affected with the molecular vibrations which force conscious sensation and perception upon the intellect. The action thus rendered necessary is involuntary and distasteful, since it takes place without the concurrence of the individual Will. Hence Consciousness is born in pain, every act of it being attended with aversion and suffering. It is, says Hartmann, "a bitter medicine, but without it no recovery is possible; and as it is swallowed at every moment in infinitesimal doses, its bitterness soon escapes perception."

Some indications of a theory similar to this respecting the origin of Consciousness may be gleaned from earlier writers, especially from some of the mystics. Thus Jacob Böhme says, "nothing can become revealed to itself without opposition or contrariety.

For if there is nothing which resists it, the process of its development goes on unchecked, and it is not thrown back upon itself in reflection. But if it does not come back upon itself, as to that from which it originally went forth, then it knows nothing of its primitive condition." And in like manner Schelling argues, that "if the Absolute is to become manifest to itself, then, in respect to its objective, it must appear as dependent upon something else, upon something foreign to itself. This dependence, however, is not of the essence of the Absolute, but belongs merely to its manifestation." Hence he concludes, that "not the mental states themselves, but the Consciousness of them, is conditioned by an affection of the organism; and if the empiricists had restricted their assertion to the latter point, there would be nothing to object to their doctrine."

We come now to the great question between Monism and Plurality or Individualism. Have we sufficient evidence that the Unconscious which works in any one living organism, say, in my own body and mind, is one and the same with that which similarly affects and governs every manifestation of life around me, and which is, in fact, omnipresent in nature, creating and controlling all objects and events in order to carry out a single purpose? If Hartmann's argument here still leaves a doubt whether he has fully proved his point, it is because the question lies within the domain of pure metaphysics, and his method, which is that of induction as applied in the physical sciences, appears not only insufficient, but inapplicable to the conditions of the problem. He sanctions and adopts, it is true, the usual metaphysical reasoning of the Philosophers of the Absolute, especially that founded upon the merely phenomenal character of Space and Time, and the consequent unreality of all distinctions of individual being. But he endeavors to supplement and fortify this argument by considerations drawn from the various branches of physiology and natural history.

He relies, in the first place, upon the axiom denominated Occam's razor, *entia non multiplicanda sunt præter necessitatem*, ultimate principles are not to be multiplied more than is absolutely necessary. If one principle of the Unconscious, for instance, is enough satisfactorily to account for all those operations and processes in my own organism which do not come within the purview of Consciousness, the burden of proof falls upon him who maintains that there are many such principles, coördinate with each other, and all working harmoniously towards one and the same end. The unity of the Unconscious in this case is also farther indicated

by the unity of the organism within which it acts, by the continuity of its action, by the singleness of purpose or final cause which seems to be the object of its endeavor, and by the manner in which all the parts are made to coöperate with each other and with the whole. Moreover, as we have seen, matter and consciousness themselves are only phenomenal forms of the Unconscious; and therefore the unity of this principle in any individual organism is the strongest expression of unity which can be found anywhere in nature.

But the consciousness of Peter is phenomenally distinct from that of Paul; and it is certainly conceivable that the Unconscious also, which directs the life of one, is not identical with the corresponding principle manifested in the other. Hartmann's argument in favor of the essential unity of this principle is perfectly conclusive; it coincides in every respect with the ordinary argument of the theist to prove the unity of God. It is only when he reasons as a Pantheist or Monist, only when he strives to identify the One with the All, that the weakness of his theory becomes manifest. It is only in reference to this latter portion of the doctrine, that he finds himself reduced to the necessity of maintaining, that our idea of the distinction between unity and plurality, after all, is merely relative. What we usually call an Individual, whether it be a stone, a living organism, a community, or a universe, is not absolutely one, for it confessedly has a multiplicity of parts. No one denies a sort of unity in creation; in a certain sense, a creator or artist is one with his work, for this is the expression at once of his thought, his character, his endowments, and his skill. It is commonly said of a great artist, that he puts himself into his work.

But this is not absolute oneness, of which, as it seems to me, we have a perfect type in the absolute indivisibility of the thinking Self, which is a pure Monad, so that in respect to it the distinction between whole and part is meaningless. I *know*, for I have the direct testimony of consciousness, that the being which I call Myself is an absolute unit; that I am one in all my acts, in my responsibility, in the remembered past and the perceived present; that it is not one portion of me which feels, another which imagines, and a third which wills, but that these are only various modes of action of one agency. I also know, that my remembered self is one and the same with my present self; otherwise, no assertion of memory could be trusted, no imputation of wrong-doing could be justified, no chain of reasoning depending upon the remembrance of its several steps could be relied upon. Hence, no process of in-

ference, however ingenious, can shake this knowledge; for as it does not rest upon argument, but upon direct intuition, the reasoning which would refute it stultifies itself. One who is conscious of having committed a great crime many years ago cannot reason himself into a conviction that he is now a different being from the one who incurred the guilt; the stings of remorse prove that he is one and the same with the perpetrator. When it is urged that we cannot describe Self, or give any definition of personality, except by enumerating its attributes and successive states, the answer is, that in this respect it is in the same category with all the simple ideas of consciousness, which, as John Locke told us long ago, cannot be defined because they do not admit either of analysis or description. Hence, they cannot be communicated to another person except by giving him an opportunity of obtaining them for himself. I cannot teach a congenitally blind person what the color blue is; and even if the learner has eyes, I can instruct him only by showing him a blue object, and taking for granted, what is by no means sure, and never can be rendered sure, that it makes the same impression upon his organs of vision that it does upon mine. If the spontaneous action of his intellect had not previously evoked in the child's mind the idea or perception which is called "myself," no possible instruction, no principle of imitation, no conceivable combination of a sign with the thing signified, could teach him how to use the word "I" correctly, any more than one blind from birth could learn what "blue" means.

Monism is shivered upon this rock, that it is compelled to deny the separate individual being of the Ego, and thereby to contradict the immediate testimony of consciousness. We have here an indubitable case of absolute unity, like that of a mathematical point; and a doctrine of *Alleinheit*, which seeks to establish merely a relative unity, like that of a hive of bees, or even of the several parts, or physiological units, of a living organism, does not amount to much. Hartmann fails to perceive that the position of Descartes, afterwards adopted by Fichte, is really impregnable. All his reasoning upon the subject, ingenious as it is, is actually confuted in three words: *Cogito, scilicet sum.* Though the word "Individual" properly signifies *indivisible*, and is therefore strictly applicable only to an absolute unit, the Philosophy of the Unconscious assumes that there is a hierarchy of "Individuals," every one of which, except the lowest, is a unit relatively to all which are above it, though it is an organized community of those which are next below it in the scale.

Adopting the cellular theory of Virchow, Hartmann teaches that a living organism is a skilfully constituted community of almost countless living cells, every one of which has an independent life and definite functions, the coöperation of all the different classes of them being necessary to keep up the economy of the organism as a whole, an Individual of a higher order, which they collectively constitute. Billions of such cells circulate in the blood of every grown-up man, and all have their various and independent offices to perform, like the working bees which keep up the collective life of the hive. Still farther; any one of these cells has its distinct parts and organs, such as the cell-wall, the matter contained therein, the nucleus, and the nucleolus; and each of these has its special functions, the performance of which is necessary in order that the collective whole may do its work. Here again, therefore, we have an Individual organism constituted by an association of Individuals of a lower order. And nothing hinders us from going still lower, guided by the light of analogy when the power of the microscope fails, — from considering each of these cell-organs as a community, or little state, made up of primitive atoms or Leibnitzian Monads, every one of which, through its special nature, stage of development, or particular place in the system, contributes its part to qualify the cell-organ for its office.

We have next to consider the relation of the Individual of consciousness, or the spiritual unit, to the external and material Individual in which it acts. Here again, according to Hartmann, we have a hierarchy of relative units, the consciousness of the cerebral hemispheres being the dominant one in the system, and therefore controlling and regulating the separate consciousness in each of the ganglia or lower nervous centres, although itself dependent in some measure on the coöperation of its ministers. And a similar relation is asserted to exist between the consciousness of each ganglion and that of every separate cell which enters into the formation of that ganglion and capacitates it for its work. Lower than this Hartmann does not go in search of the phenomenal unit of mind; for, as we have seen, molecular disturbance of a certain degree of strength or vivacity is a necessary condition of the origin of consciousness, faint impressions upon the nerves and brain passing without notice. In any organism lower than the cell, he finds no trace of action energetic enough to give rise to consciousness. Each Individual consciousness is constituted by the joint action of those next below it in the scale; and, in turn, is itself controlled and inspired by that which is above it, and which enters as an un-

conscious factor into its work. Then the brain-consciousness of every individual man in the universe may be regarded either as a constitutive element, or as an objective manifestation, of the universal and all-pervading Unconscious; if it be the former, we have only a relative unity; if it be the latter, then the doctrine is an unproved hypothesis. Either form of the theory contradicts our immediate intuition of the independent unity of human consciousness, and rests upon a supposition, which is entirely devoid of evidence, that there is a separate consciousness in every ganglion, and even in every cell, of the human organism.

Hartmann would have us believe, that consciousness does not belong to the essence, but only to the phenomenal form or manifestation, of individual being. I maintain, on the contrary, that self-consciousness is the only strictly indivisible being that we directly know, the primitive atom (*Uratome*) being merely a supposition invented to explain the phenomena, and either the God of the theist, or "the Unconscious" of our author, being revealed to us not immediately, but by inspiration or inference. He says, that the undivided ant or polyp has one consciousness, but when cut apart, that it has two; and that this is true, also, of parent and offspring before and after their physical connection with each other is severed; and also that the halves of two different polyps, each of which has a consciousness of its own, when brought together and united, form but one animal and one consciousness. I answer, it is an unproved and improbable hypothesis that the ant, polyp, or offspring still *in gremio matris*, has any consciousness at all. He argues, that the doctrine of the Unconscious being one and the same in all things explains all that is marvellous and otherwise inscrutable in the phenomenon of *Hellsehen* or *clairvoyance;* since on this theory, the seer is identical with the seen. The obvious reply is, that the phenomena are also perfectly explicable on the doctrine of the theist, that there is an Intellect and Will which is omnipresent, but not identified with the universe; for the inspiration of the Almighty, which first endowed man with understanding, can also give him "the vision and the faculty divine." I need not dwell on the remainder of the discussion, since it tends to show, at the utmost, as in this last instance, that the essential unity of all things is a possible, but not that it is a probable, hypothesis.

In the popular sayings, which are also maxims of science, that Nature does nothing in vain, but always acts for the best, invariably adopting the simplest means of effecting its purpose, Hart-

mann finds proof of the Leibnitzian doctrine, which he implicitly adopts, that this is the best possible universe, being a manifestation of the infinite wisdom and power of its author, governor, and constant guide. In truth, little more is needed than a recapitulation of what has been already proved in order fully to establish this conclusion. As every action of what we call *force* is the expression of Will, which would not be Will if it were not made determinate by a definite *content*, or aim, every act of the Unconscious must have a special purpose. And this must be the best purpose, since it is dictated by an allwise intelligence; for the omnipresent Intellect never blunders, wavers, or doubts, but having all the data at its command without requiring the aid of memory, instantaneously grasps the right conclusion from them; and by virtue of its infinite prevision (*Hellsehen*), it must select the best possible ends and the best possible means of attaining them. Its action is incessant, and whenever or wherever need exists, it always intervenes at the fittest moment. All this is seen in the healing and recuperative agency of nature; in its first building up the organism with its countless contrivances and excellences, and then preserving it through perpetually repairing the waste of old material; by its keeping up the species through propagation, and constantly ennobling it through "the survival of the fittest." "These incessant interventions of an allwise Providence are even *natural;* that is, they are not arbitrary, but conformable to law; for they are determined by a logical necessity, and therefore must be always adapted to the infinitely varied relations and needs of the present moment, and to the ultimate purpose for which all things exist." "In truth, our contemplations of organic life only confirm the lofty affirmation of Christian theology, that the government of God is not merely a general direction of earthly affairs as a whole, but its immeasurable perfection and minuteness are marvellously revealed in just this respect, that his controlling Providence is omnipresent and equally efficient in the least, as in the greatest, events."

The wisdom of the Unconscious is all the more to be praised when it economizes force, and avoids a constantly recurring necessity of labor, through some ingenious contrivance, whereby in each case the end is sure to be obtained in the fittest possible manner. The most comprehensive and important of all such contrivances is the entire system of physical and chemical laws. But as the very nature of mechanism confines it to a class of homogeneous cases, while in fact many cases are peculiar in some respects,

these contrivances, however admirable, can never do away with the necessity of frequent immediate intervention by the Unconscious. As soon as the expenditure of force in the creation of a mechanism would be greater than the economy of force effected by it, which is the case generally with complex combinations of circumstances, recourse must be had to what is called a special Providence. Of this nature are all inspirations to individual human minds whereby the course of history is permanently affected, and the tide of culture and progress is turned towards the end which the Unconscious always had in view. A thought suddenly occurring at the right moment to a Cromwell or a Napoleon, a Luther or a Loyola, may alter the whole aspect of human affairs in the civilized world.

In view of such considerations as these, we cannot avoid attributing to the Unconscious the divine qualities of omniscience, omnipresence throughout all time, and absolute wisdom. Then we must adopt the doctrine of Leibnitz, and believe that, at the beginning of all things, all possible universes were present in idea to the divine Intellect, and that *this* universe was made actual merely because it is the best possible out of the whole number. Being incapable of error, the Unconscious cannot have been deceived in its estimate of the comparative value of this world; and being omnipresent and incessantly active throughout all time, there could not have been any pause or omission in its government, whereby the world could have deteriorated from its pristine state. These are the conclusions, be it observed, of an avowed materialist and atheist, who finds himself driven to them by inductive reasoning from observed facts.

He refuses to admit, however, the remainder of the doctrine of Leibnitz, that evil is merely of a privative character, since it is not the entire absence, but only a diminution, of conceivable good. Designating an unmixed good as A, and an evil as a, Hartmann argues, that any reasonable person would desire to possess A alone, rather than $A + a$. But he is wrong, for by supposition, a is not unmixed evil; and if the amount of good in it predominates over the evil, while the evil is also a necessary condition of the existence of this good, then $A + a$ is preferable to A alone. It is an evil to have a broken finger; but this is no sufficient reason for amputating it, since even in its present state, with the chance that the bone may be reunited, it is better than no finger at all. The doctrine of Leibnitz merely affirms that there is no evil without some compensation; and this is true, if we take a sufficiently broad view

of each case. Even if the finger be amputated, a hand with three fingers is not to be condemned as an incumbrance. Our view is sufficiently broad only when we consider human life as a whole; before the Pessimist can establish his conclusion against Leibnitz, he ought to take the aggregate results of existence, and show that there is an absolute preponderance of evil over good. This he cannot do, even if we take for granted the illogical assumption, which he always makes, that happiness, and not holiness, is man's highest interest.

But Hartmann is right in maintaining that the principal doctrine of Leibnitz leaves the matter short; for although the universe in which we live is the best possible, it may very well be that it is still so bad that no universe at all, that is, nothingness, would be preferable. "Bad is the best" is even a popular saying; the best road between two towns in a rugged district may still be a detestable one. The philosophy of Leibnitz, however, when thus engrafted upon that of Schopenhauer, is an immense improvement on the doctrine of the latter; since the union of the two doctrines proves, that the only evil which exists is inherent in the nature of things, and is properly regarded as "metaphysical" or irremediable. The supposition of its removal being a contradiction and an absurdity, the existence of it brings no imputation either upon the wisdom or the goodness of the Creator. The presence of the so-called evil may be even a necessary means of producing the utmost possible amount of good, so that its absence or removal would be a positive defect in the plan of the universe. If the compensatory good is in considerable excess over the harm resulting from the only possible means of creating that good, it is obvious that the aggregate beneficial result will be greater than it would have been if all harm had been prohibited. Hartmann himself points out for admiration the wisdom of the Unconscious, as manifested by implanting in the human heart those impulses of pity, beneficence, gratitude, distributive fairness, and retributive justice, which counteract the feeling of egoism or selfishness that is necessary for the preservation of individual well-being. Here, surely, the net result of good obtained is greater than would have been possible, had selfishness been altogether eliminated.

After what has been said, we may dismiss unnoticed Hartmann's long and gloomy disquisition upon the miseries of human life, whereby he attempts to prove that the existence of the universe is only an impertinent and burdensome interlude in the comparatively blissful realm of nothingness, and that a well-in-

formed intellect would prefer not to be. He admits that the whole inquiry, though important in its bearings on the ultimate principles of philosophy, is not of immediate influence on the subject promised in the title of his work, "the Unconscious." Most of his argument is intended to dissipate the illusions of the vulgar mind in respect to the attainableness of happiness either here or hereafter, and thereby to induce the educated and thinking mind to strive only after such improvement of the intellect as will finally correct these illusions, and dispose mankind generally to bring the world to an end by common consent. But the whole subject of Pessimism has been considered at sufficient length in connection with the philosophy of Schopenhauer, and I gladly waive any further treatment of the dismal topic. A healthy mind, not constitutionally disposed to gloom, and neither harassed by exceptional experience of the ills of life, nor corrupted by metaphysical refinements, could not seriously entertain the theory for a moment.

We come now to the last question, What is the ultimate Purpose, the final end and aim, to which all minor and immediate aims are subservient, for the creation of the world and for the development of its affairs through its continuance in being? What motive had the measureless wisdom of "the Unconscious" for this particular manifestation of itself, when it was free to assume any other mode of being, or to carry out any other "Process" of development? This ultimate motive, according to Hartmann, cannot be the promotion of justice and morality, or the increase of virtue; for he is a utilitarian, and holds that virtue is not an end, but only a means for the attainment of some worthier object. Neither can it be happiness, for he thinks he has proved that this is not obtained at any stage of the Process, but only its opposite, misery, this being aggravated, too, as the development of history goes on, through the clearing up of illusions and the augmentation of consciousness. Neither can freedom be the aim of the Process, "for I hold that freedom is nothing positive, but only the absence of compulsion; and since the Unconscious is one and all, there is nothing which could place it under constraint." Freedom, moreover, is a consciousness of the absence of necessity; and therefore the increase of freedom is identical with the enhancement of consciousness. And this is a sufficient indication of what is already evident on other grounds, that we can hope to ascertain the ultimate purpose of creation only by searching for it in that direction where we behold a decided and constant progress. And

this is to be found in the development of consciousness; for here alone we witness continual advancement from the primitive cell up to the dawn of animal life, and thence to the culmination of such life in the brain of man. Thus Hegel says, "every thing which takes place in heaven and on earth, the life of God and all that is done in time, strives only to this end, that the Spirit may know itself, may become an object to itself, may rise from self-involved to distinct and separate being; it is self-diremption or duplication, in order to be able to find itself and to come to itself."

The ever-rising development of consciousness, therefore, marks the drift of the current, and shows the direction in which we are hastening; yet it cannot be, in itself, the end or ultimate purpose of the journey. For consciousness, as we have seen, is born in pain, lives in pain, and purchases by pain every step in its own advancement. And what has it in itself as a compensation for all this suffering? Only a vain duplication of self in a mirror! Was there not, then, already real misery enough, without doubling it in the magic-lantern of consciousness? Since the infinite wisdom of the ruling Intellect must be opposed to any such increase of suffering, it cannot be that consciousness is an end unto itself, but its development must serve as a means to some higher end. Every thing which lives strives after happiness; this is the most universal principle of action that we know of; it is the essence of the Will itself seeking its own gratification. Mere Will, however, though it is the only spring of activity, is essentially blind; it is not merely *illogical* or irrational, because it does not reason at all, even wrongly. It simply craves, and acts out its cravings in automatic volitions. Hence it is properly *alogical*, being entirely devoid of reason, just as the Intellect, being in its very nature distinct from Will, cannot act, but simply knows. Consequently, this ill-matched pair, indissolubly united in the Unconscious, cannot coöperate; neither can help the other. Vainly does the all-wise Intellect perceive that the unreasoning Will is entirely in the wrong, since its ceaseless craving for happiness merely increases misery; the *alogical* Will cannot heed its warnings, and cannot impart its own capacity of action to its wise but helpless companion. As long as they are tied together, like a balky team, they neutralize each other's powers. Blind Will determines *that* the universe, miserable as it is, shall continue in being; for this is the result of the persistent action of Will. Intellect determines *how* and *what* the universe shall be, not directly indeed, but through holding up a

picture of the best possible state of the world as something to be striven for; and this ideal is instantly realized by the Will.

Bad is the best, however; and this the Intellect knows full well. It has recourse to an artifice, therefore, in order to obtain the utmost feasible good. Happiness is unattainable; but freedom from pain, which is the nearest possible approximation to it, may be secured by a return to nothingness. Hence the Intellect forms the conception of a universe in which the Will shall be divided against itself, through the indefinite multiplication of individuals, each striving independently for ends of its own; and the necessary result of such independent action, as we have seen, is the emancipation of Intellect from the Will through the development of Consciousness. This conception of a universe, of course, is instantly realized by the blind Will, which knows not that it is thereby cheated into a contest with itself, that ideas will thus be forced upon it which it has not willed, that thought will thus be severed from action, and that the finite Intellect, thus made independent, will be gradually led through the enhancement of consciousness and the increase of knowledge, to will the annihilation of all things, and thus to rid itself of the misery of existence. As Intellect can never be separated from the Will in the Unconscious, the ultimate purpose of the universe is to effect this divorce through the action of finite conscious minds and the advancement of knowledge, which must finally correct the illusions which keep up the vain pursuit of happiness, and bring about by common consent the end of all things.

Schopenhauer's philosophy aims at the same result, but proposes to accomplish it by a different method, namely, by advising the individual man to cease to will, and thereby, through asceticism, self-denial, and the privation of nourishment, to cease to be. Hartmann justly objects, that this would be only protracted and painful suicide by starvation, and be no more efficient as a means of bringing the world to an end than the death of an individual in the ordinary course of nature. Final deliverance from the misery of this world cannot be obtained by an act of individual Will, as this is merely phenomenal, but only by universal consent, which would be an expression of the universal Will that is both one and all. And this deliverance is not near at hand, but must be worked for as an object in the distant future. It can take place only at the close of "the Process," at the termination of the struggle between Consciousness and the Will, when the development of the former shall have reached its climax, at the last day,

when the cravings of the Will shall be silenced, when activity shall cease, and "Time shall be no more." We can do something, indeed, to hasten this consummation, by laboring for the advancement of knowledge, which will finally convince the whole human race, that all is vanity and vexation of spirit. Not by personal renunciation and cowardly withdrawal from the conflict, therefore, as Schopenhauer teaches; but by bearing our burden, by affirming the Will to live with all its pains and sorrows, by devoting ourselves to the cultivation of the intellect and to the education of the race, shall we help to bring the universe nearer to the haven of rest, to the blissful repose of nothingness. "Bravely onward, then, in the great Process of development, as laborers in the Master's vineyard! For it is only this Process which can lead to final redemption."

And this is the Gospel of Monistic Atheism! It is one long wail of despair, which always must have utterance when man finds that he is without a Father, and the universe without a God. It would be a waste of time and effort to dwell upon the extravagance of the theory, or to offer arguments in its confutation; for I cannot believe that it is seriously entertained, as an opinion influencing conduct, by any sane student, or even by its author himself. Descartes laid one permanent corner-stone of modern metaphysics in his *Cogito, scilicet sum;* and Kant established another in his "Groundwork of Ethics," when he pointed out the absolute and imperative character of the Moral Law. Any system which is based upon an arbitrary denial of these two fundamental truths of consciousness may be summarily put aside; it can merit notice only as a matter of curiosity, and as an illustration of the wild vagaries of which the human mind is capable. Nearly all that is really valuable in Hartmann's work is found in its first two Books, which contain the whole Philosophy of the Unconscious properly so called. In these we have a storehouse of curious and interesting facts, admirably illustrated and dovetailed into system, and much that is original and profound in speculation. The third Book, containing what is called "the Metaphysics of the Unconscious," is for the most part an exercise of perverted ingenuity, for it is a jumble of incongruities and contradictions. It is an attempt to reconcile materialism with spiritualism, realism with idealism, optimism with pessimism, atheism with the belief in a divine Providence, and monism with common sense. But even this medley will be of service to the attentive student, as it evinces a large acquaintance with German philosophy, and great power of

reducing its different systems to their briefest possible expression, of pointing out their leading characteristics, and making nice distinctions between them. Even at his worst, Hartmann has three considerable merits; he is learned, he is ingenious, and he is never dull.

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